

KINDERGARTEN II

Mathematics

Teacher's Guide
2018/2019

Term 1

FOREWORD

This is a pivotal time in the history of the Ministry of Education and Technical Education (MOETE) in Egypt. We are embarking on the transformation of Egypt's K-12 education system starting in September 2018 with KG1, KG2 and Primary 1 continuing to be rolled out year after year until 2030. We are transforming the way in which students learn to prepare Egypt's youth to succeed in a future world that we cannot entirely imagine.

MOETE is very proud to present this new series of textbooks, Discover, with the accompanying digital learning materials that captures its vision of the transformation journey. This is the result of much consultation, much thought and a lot of work. We have drawn on the best expertise and experience from national and international organizations and education professionals to support us in translating our vision into an innovative national curriculum framework and exciting and inspiring print and digital learning materials.

The MOETE extends its deep appreciation to its own "Center for Curriculum and Instructional Materials Development" (CCIMD) and specifically, the CCIMD Director and her amazing team. MOETE is also very grateful to the minister's senior advisors for curriculum and early childhood education. Our deep appreciation goes to "Discovery Education," "Nahdet Masr," "Longman Egypt," UNICEF, UNESCO, World Bank Education Experts and UK Education Experts who, collectively, supported the development of Egypt's national curriculum framework. I also thank the Egyptian Faculty of Education professors who participated in reviewing the national curriculum framework. Finally, I thank each and every MOETE administrator in all MOETE sectors as well as the MOETE subject counselors who participated in the process.

This transformation of Egypt's education system would not have been possible without the significant support of Egypt's current president, His Excellency President Abdel Fattah el-Sisi. Overhauling the education system is part of the president's vision of 'rebuilding the Egyptian citizen' and it is closely coordinated with the ministries of higher education & scientific research, Culture, and Youth & Sports. Education 2.0 is only a part in a bigger national effort to propel Egypt to the ranks of developing countries and to ensure a great future to all of its citizens.

WORDS FROM THE MINISTER OF EDUCATION & TECHNICAL EDUCATION

It is my great pleasure to celebrate this extraordinary moment in the history of Egypt where we launch a new education system designed to prepare a new Egyptian citizen proud of his Egyptian, Arab and African roots - a new citizen who is innovative, a critical thinker, able to understand and accept differences, competent in knowledge and life skills, able to learn for life and able to compete globally.

Egypt chose to invest in its new generations through building a transformative and modern education system consistent with international quality benchmarks. The new education system is designed to help our children and grandchildren enjoy a better future and to propel Egypt to the ranks of advanced countries in the near future.

The fulfillment of the Egyptian dream of transformation is indeed a joint responsibility among all of us; governmental institutions, parents, civil society, private sector and media. Here, I would like to acknowledge the critical role of our beloved teachers who are the role models for our children and who are the cornerstone of the intended transformation.

I ask everyone of us to join hands towards this noble goal of transforming Egypt through education in order to restore Egyptian excellence, leadership and great civilization.

My warmest regards to our children who will begin this journey and my deepest respect and gratitude to our great teachers.

Dr. Tarek Galal Shawki
Minister of Education & Technical Education

Contents

How to Use This Guide

The Mathematics teaching guide is designed to support teachers in the preparation and implementation of learning activities by providing clear, step-by-step instructions embedded with teacher input, instructional strategies, and classroom management techniques.
In these learning activities, students explore, play, use manipulatives, move their bodies, communicate and collaborate with colleagues, ask and seek answers to questions, and practice new skills and concepts.

This instructional approach aims to help students accomplish the following goals:

- Build early numeracy
- Discover connections between and among math concepts
- Develop foundational computational skills
- Acquire and use math vocabulary
- Build awareness of measurement concepts and geometric shapes
- Enhance critical thinking, problem solving, collaboration, and communication
- Increase enjoyment of math

If instructors have not used such a guide before, some practical advice follows:

- Read each chapter carefully. Make notes and highlight important details.
- Take particular note of sections labeled **Term**, **Chapter**, or **Lesson Preparation for the Teacher**. These sections include steps the teacher will need to complete in order to implement the activities in the term, chapters, and lessons. Advance preparation will ease the instructor's workload and ensure successful learning experiences for students.
    - Gather the necessary materials and make any preparations before implementing the lessons.
    - Consider additional classroom management techniques necessary for your particular class and learning environment.

- Please note that a section of the Student Book has been designated as a Math Journal. The Math Journal is referenced throughout the teacher's guide. Students will draw, write, and complete math activities in their journals.
    - Math Journals are a wonderful resource for informally assessing student progress. They can help the instructor determine whether or not students are successfully learning and applying new skills and concepts. They can also provide critical information about the kinds of mistakes students are making. That information can be used to plan future instruction and differentiation.
- Take note of the following:
    - What are the pupils discovering or learning? (Content)
    - What are the students being asked to do? (Activity)
    - What is the teacher discovering about the pupils? (Assessment)
    - How could you adapt the lesson for the different abilities in your class? (Differentiation)

- During and after implementing each lesson, reflect and make notes on what was successful and possible suggestions for improvement.
- Planning with another teacher can often lead to greater implementation success as it provides an opportunity to discuss classroom expectations and management procedures and ensures that lessons are differentiated to better suit the needs of students. It is suggested that teachers meet with other instructors at least weekly to plan and reflect.

Background

In this Teacher Guide, Mathematics instruction is divided into Chapters. Each Chapter includes 10 days of instruction. The teaching of mathematics and the building of numeracy is very linear, with students learning new content in increments, and adding to their conceptual development and understanding slowly over time.

Mathematics lessons are organized into three components:

- Calendar and Movement (15-20 minutes)
  - During this daily routine, students develop number sense, early place value concepts, counting fluency and problem-solving skills. Students explore quantity and practice counting through patterns and movement.
- Learn (25-30 minutes)
  - During this daily routine, students learn and apply various math skills as the Teacher Guides them through review, instruction and practice.
- Share (5-10 minutes)
  - During this daily routine, students develop their ability to express mathematical ideas.

Some Instructional Considerations

Each section should be implemented every day. However, in some cases, students may need a few more minutes for one section and another section (or two) will have to be shortened for that day. The instructor should use best judgment and knowledge of students and their needs.

Story problems and numbers are provided as examples. The instructor can use the story and numbers provided or create stories of their own. If the numbers in a story problem or sample problem are changed, be sure to limit the quantities to those identified in the indicators and outcomes (for example, “within 10”).

The instructor is encouraged to incorporate familiar counting songs, poems, rhymes, math stories/literature, and math games and activities that are not included in this Teacher Guide.

KG II

Mathematics Scope and Sequence for Term 1

MATH	CHAPTERS 1-3	CHAPTERS 4-6
COUNTING AND CARDINALITY		
Count objects to tell how many there are.	X	X
Count numbers up to 20, as a symbol, meaning, comparing, arranging.		X
Read and write numerals up to 20.	X	X
Understand the relationship between numbers and quantities, up to 20.	X	X
Write numbers and represent quantities with a number, up to 20.	X	X
Understand the relationship between numbers and quantities, up to 20.	X	X
Make equivalent (equal) sets.	X	X
Identify the number of objects in familiar groupings without counting (e.g., number of dots on a side of dice, numbers on playing cards).		X
Apply the understanding that each successive number name refers to a quantity that is one larger as they count	X	X
Understand the concepts of greater than, less than, and equal to.		X
Compare two numbers between 1 and 20 presented as written numerals.	X	X
OPERATIONS AND ALGEBRAIC THINKING		
Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, or verbal explanations, expressions, or equations.		X
Add and subtract within 20 using strategies such as • using objects or drawings to represent a problem • decomposing numbers into pairs in more than one way (e.g., 5=2+3 and 5=4+1) • finding the number that makes ten when added to any number 1-9		X
Fluently add and subtract within 10.		X
NUMBERS AND OPERATIONS IN BASE TEN		
Compose and decompose numbers from 11-19 into ten and some units/ones using objects or drawings. For example, 12 means 10 and 2, 15 means 10 and 5.		X

MATH	CHAPTERS 1-3	CHAPTERS 4-6
MEASUREMENT AND DATA		
Compare orally between length and weight and size using longer than/shorter than, heavier/lighter, bigger/smaller.	X	X
Collect and classify data using objects and drawings (up to 20).	X	X
Classify objects into given categories (for example length, weight, size, color) and sort categories by count.	X	X
GEOMETRY		
Describe objects in the environment using names of shapes.	X	
Correctly use terms such as above, below, beside, in front of, behind, and next to.	X	
Correctly name 2-dimensional shapes (circle, triangle, square, rectangle).	X	

KG II Mathematics Pacing Guide for Term 1

CHAPTER	DAY	INSTRUCTIONAL FOCUS
1	1	Students will: • Identify the month, day, and date • Count to 3 • Count objects to tell how many there are to the number 3 • Use the terms *above* and *below*
	2	Students will: • Identify the month, day, and date • Count to 3 • Count objects to tell how many there are to the number 3 • Make equivalent sets for quantities up to 3 • Use the terms *above* and *below* • Identify circles
	3	Students will: • Identify the month, day, and date • Count to 4 • Use the terms *above* and *below* • Identify circles
	4	Students will: • Identify the month, day, and date • Count to 4 • Count objects to tell how many there are to the number 4 • Make equivalent sets for quantities up to 4 Use the terms *above* and *below* • Identify circles
	5	Students will: • Identify the month, day, and date • Count to 5 • Use the terms *above* and *below* • Identify circles
	6	Students will: • Identify the month, day, and date • Count to 5 • Count objects to tell how many there are to the number 5 • Make equivalent sets for quantities up to 5 Use terms "above" and "below" • Identify circles and triangles
	7	Students will: • Identify the month, day, and date • Count to 5 • Count objects to tell how many there are to the number 5 • Make equivalent sets for quantities up to 5 Use the terms *above* and *below* • Identify circles and triangles • Record mathematical thinking
	8	Students will: • Identify the month, day, and date • Count to 5 • Count objects to tell how many there are to the number 5 • Make equivalent sets for quantities up to 5 Use the terms *above* and *below* • Identify squares • Record mathematical thinking

CHAPTER	DAY	INSTRUCTIONAL FOCUS
1	9	Students will: • Identify the month, day, and date • Count to 5 • Use the terms *above* and *below* • Identify circles, triangles, and squares • Represent the number 1 in words and pictures • Record mathematical thinking
	10	Students will: • Identify the month, day, and date • Count to 5 • Use the terms *above* and *below* • Identify circles, triangles, and squares • Represent the number 2 in words and pictures • Record mathematical thinking
2	11	Students will: • Identify the month, day, and date • Write the number 3 • Visually represent 3 using pictures • Use the term “data”
	12	Students will: • Identify the month, day, and date • Write the number 4 • Visually represent 4 using pictures • Collect data • Compare quantities
	13	Students will: • Identify the month, day, and date • Write the number and word 5 • Visually represent 5 using pictures • Collect data • Compare quantities
	14	Students will: • Identify the month, day, and date • Practice counting and comparing quantities up to 3 • Create equivalent sets up to 3 • Compare quantities to find the greater number
	15	Students will: • Identify the month, day, and date • Practice counting and comparing quantities up to 4 • Create equivalent sets up to 4 • Compare quantities to find the lesser and equal numbers
	16	Students will: • Identify the month, day, and date • Count up to 5 • Create equivalent sets up to 5 • Compare quantities to find more and less
	17	Students will: • Identify the month, day, and date • Review written numbers 1-5 • Visually represent quantities 1-5 using pictures, objects, and number line • Collect data • Compare quantities to find more, less, and equal

CHAPTER	DAY	INSTRUCTIONAL FOCUS
2	18	Students will: • Identify the month, day, and date • Review written numbers 1-5 • Visually represent quantities 1-5 using pictures, objects, and number line • Collect data • Compare quantities to find more, less, and equal
	19	Students will: • Identify the month, day, and date • Practice counting up to 6 • Visually represent quantities 1-6 using pictures, objects, and number line • Answer questions about survey data • Compare quantities to find more, less, and equal
	20	Students will: • Identify the month, day, and date • Practice counting up to 7 • Visually represent quantities 1-7 using pictures and objects • Answer questions about survey data • Compare quantities to find more, less, and equal
3	21	Students will: • Identify the month, day, and date • Participate in data collection activities • Answer questions about a class graph • Count to 8 • Visually represent quantities up to 8 using pictures
	22	Students will: • Identify the month, day, and date • Participate in data collection activities • Answer questions about a class graph • Count to 9 • Visually represent quantities up to 9 using pictures
	23	Students will: • Identify the month, day, and date • Participate in data collection activities • Answer questions about a class graph • Count to 10 • Visually represent quantities up to 10 using pictures
	24	Students will: • Identify the month, day, and date • Participate in data collection activities • Answer questions about a class graph • Write numerals 1, 2, and 3 • Visually represent quantities up to 3 using pictures
	25	Students will: • Identify the month, day, and date • Participate in data collection activities • Answer questions about a class graph • Write numerals 4, 5, and 6 • Visually represent quantities up to 6 using pictures
	26	Students will: • Identify the month, day, and date • Participate in data collection activities • Answer questions about a class graph • Write numerals 7, 8, and 9 • Visually represent quantities up to 9 using pictures

CHAPTER	DAY	INSTRUCTIONAL FOCUS
3	27	Students will: • Identify the month, day, and date • Write numerals up to 10 • Visually represent the quantities up to 10 using pictures • Use the terms greater than and less than
	28	Students will: • Identify the month, day, and date • Write numerals up to 10 • Visually represent quantities up to 10 • Identify the days of the week that are today, tomorrow, and yesterday • Use the terms greater than, less than, and equal to
	29	Students will: • Identify the month, day, and date • Write numerals up to 10 • Visually represent quantities up to 10 • Identify the days of the week that are today, tomorrow, and yesterday • Compare two quantities • Use the terms greater than, less than, and equal to
	30	Students will: • Identify the month, day, and date • Write numerals up to 10 • Visually represent quantities up to 10 • Identify the days of the week that are today, tomorrow, and yesterday • Compare two quantities • Use the terms greater than, less than, and equal to
4	31	Students will: • Participate in Calendar Math activities • Compare and sort colleagues based on attributes • Count from 1 to 10 • Write numerals 1 and 2 • Match numbers to their names • Find "one more" and "one less" than a number • Demonstrate understanding of the relationship between number and quantity up to 5
	32	Students will: • Participate in Calendar Math activities • Compare and sort colleagues based on attributes • Count from 1 to 10 • Write numerals 3 and 4 • Match numbers to their names • Find "one more" and "one less" than a number • Demonstrate understanding of the relationship between number and quantity up to 5
	33	Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Identify the number of objects in familiar groupings • Demonstrate understanding of the relationship between number and quantity up to 5
	34	Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write numerals 1-5 • Match numbers to their names • Identify the number of objects in familiar groupings • Demonstrate understanding of the relationship between number and quantity up to 5

CHAPTER	DAY	INSTRUCTIONAL FOCUS
4	35	Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write numerals 6-10 • Match numbers to their names • Demonstrate understanding of the relationship between number and quantity up to 5 • Apply strategies to determine whether two parts make a given whole (5)
	36	Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Demonstrate understanding of the relationship between number and quantity up to 5 • Identify the number of objects in familiar groupings • Apply strategies to determine whether two parts make a given whole (5)
	37	Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Sky write numbers 1-10 • Use the counting on strategy • Compose numbers to 5 using actions, drawings, and models
	38	Students will: • Participate in Calendar Math activities • Count from 1 to 5 • Match numbers to their names • Represent composition story situations with drawings using numeric number bonds • Represent composition to 5 using numeric number bonds
	39	Students will: • Participate in Calendar Math activities • Count from 1 to 5 • Match numbers to their names • Represent composition story situations with drawings using numeric number bonds
	40	Students will: • Participate in Calendar Math activities • Count from 1 to 5 • Match numbers to their names • Represent composition story situations with drawings using numeric number bonds
5	41	Students will: • Participate in Calendar Math activities • Count from 1 to 11 • Recognize 11 as 10 and 1 more • Match numbers to their names • Find “one more” and “one less” than a number
	42	Students will: • Participate in Calendar Math activities • Count from 1 to 12 • Recognize 12 as 10 and 2 • Match numbers to their names • Find “one more” and “one less” than a number
	43	Students will: • Participate in Calendar Math activities • Count from 1 to 13 • Recognize 13 as 10 and 3 • Understand the relationship between numbers and quantities up to 10

CHAPTER	DAY	INSTRUCTIONAL FOCUS
5	44	Students will: • Participate in Calendar Math activities • Count from 1 to 14 • Recognize 14 as 10 and 4 • Understand the relationship between numbers and quantities up to 10
	45	Students will: • Participate in Calendar Math activities • Count from 1 to 15 • Recognize 15 as 10 and 5 • Model composition and decomposition of number to 10 using actions, objects, and drawings
	46	Students will: • Participate in Calendar Math activities • Count from 1 to 16 • Recognize 16 as 10 and 6 • Represent composition story situations within 10 with drawings using numeric number bonds
	47	Students will: • Participate in Calendar Math activities • Count from 1 to 17 • Recognize 17 as 10 and 7 • Represent composition within 10 using numeric number bonds
	48	Students will: • Participate in Calendar Math activities • Count from 1 to 18 • Recognize 18 as 10 and 8 • Represent decomposition within 10 using numeric number bonds
	49	Students will: • Participate in Calendar Math activities • Count from 1 to 19 • Recognize 19 as 10 and 9 • Represent decomposition within 10 using numeric number bonds
	50	Students will: • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 20 as 2 tens • Represent decomposition and composition within 10 using numeric number bonds
6	51	Students will: • • Participate in calendar math activities • • Count from 1 to 20 • • Write the numeral 11 • • Identify the number of objects in familiar groupings without counting • • Compare lengths using *longer* and *shorter*
	52	Students will: • • Participate in calendar math activities • • Count from 1 to 20 • • Write the numeral 12 • • Identify the number of objects in familiar groupings without counting • • Compare lengths using *longer* and *shorter*

CHAPTER	DAY	INSTRUCTIONAL FOCUS
6	53	Students will: • Participate in calendar math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 13 • Identify the number of objects in familiar groupings without counting • Collect data to create a picture graph • Compare data on a picture graph
	54	Students will: • Participate in calendar math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 14 • Identify the number of objects in familiar groupings without counting • Compare numerical data using *greater than*, *less than*, and *equal to*
	55	Students will: • Participate in calendar math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 15 • Identify the number of objects in familiar groupings without counting • Compare numerical data using *greater than*, *less than*, and *equal to*
	56	Students will: • Participate in calendar math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 16 • Identify the number of objects in familiar groupings without counting • Compare weights using *heavier* and *lighter*
	57	Students will: • Participate in calendar math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 17 • Identify the number of objects in familiar groupings without counting • Compare weights using *heavier* and *lighter*
	58	Students will: • Participate in calendar math activities • Count from 1 to 20 • Identify the number of objects in familiar groupings without counting • Find combinations that make 10
	59	Students will: • Participate in calendar math activities • Count from 1 to 20 • Write the numeral 19 • Classify objects and into categories and count • Identify the number of objects in familiar groupings without counting • Greater than, less than, equal to up to 20
	60	Students will: • Participate in calendar math activities • Count from 1 to 20 • Write the numeral 20 • Identify the number of objects in familiar groupings without counting • Greater than, less than, equal to up to 20

Sky Writing Procedure









Teacher will need dry erase or chalkboard with these lines:

The lines should always be referred to by their name, even if the icons are not on regular lined paper. Before writing students should identify where each line is located.

 is called the "Sky Line"

 is called the "Plane line"

 is the "Grass Line"

 is the "Worm Line"

Sky Writing posture: standing with dominant hand raised straight out (do not bend the elbow). Use two fingers and rotate at the shoulder when Sky Writing.

The teacher writes on the lines and says the steps out loud. Then, students trace the number in the air, saying the steps out loud with the teacher. Repeat each number.

Example: steps to say out loud for Sky Writing the number 1.

"Start at the Sky Line, go straight down to the grass line."

Math Counting Games

The math games described below are integrated throughout the daily lessons. This is not intended to be a comprehensive list, rather it highlights best practices for engaging students in active, inquiry- and game-based learning. Games can be adapted for many number targets. Forty is used as a consistent example.

Bingo

Create or print out **number charts** from 1-40 as shown below. You will need one chart for each student. Gather enough **counting objects** for each student to have 40.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

Call out random numbers from the number chart. Students will find the number and place a counter on it. Repeat until the class has covered a row or column of numbers.

Counting Colleagues

The teacher points to self and says, "One." The teacher then points to a student who stands and says, "Two." That student then points to a peer who stands and says, "Three." The game continues until the class reaches 40. Once 40 students are standing, students will count again, this time sitting when their colleague points to them.

Catch and Count

This game is played the same as the game above, but instead of pointing, the students gently toss a **ball** to their colleagues. The student who catches the ball stands and counts and then gently tosses the ball to the next colleague.

Counting Cups

In Counting Cups, students play in small groups. Prepare for the activity by gathering 4 paper or Styrofoam cups for each small group. Write 10 on each cup. Gather counting objects so each group has 40. Place them in bags or cups to make it easy to hand them out. Prepare the recording sheets (or have students create them) shown below.

Cups	Counters
1	
2	
3	
4	

Each student needs a recording sheet. To play, students first place 10 counters into each cup. Then, students dump out 1, 2, 3, or 4 cups of counters, count the objects, and record the total on the recording sheet across from the number of cups they dumped out. Each time students finish dumping out counters and counting, they should return 10 counters to each cup. Students will continue to dump out cups and record the totals until the recording sheet is filled.

Jump Up Game

Students squat down and clap from 1 to 40. Each time they get to a ten (10, 20, 30, 40), they jump up and shout that number.

Missing Number Detectives

Create several activity sheets that show numbers in a sequence with some of the numbers missing (examples shown below). Students work independently or in pairs to fill in the missing numbers.

1	2		4	
6			9	10

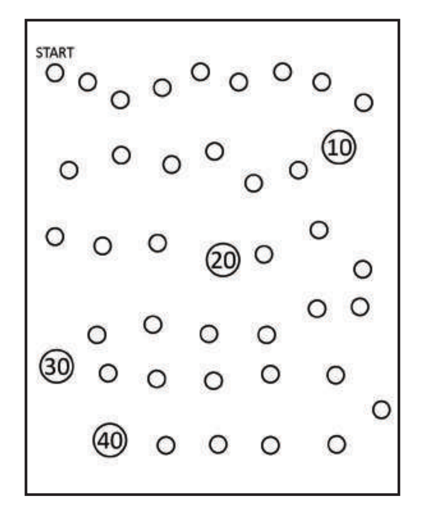
23	24	25		
28		30		32

	13	14		16
		19		21

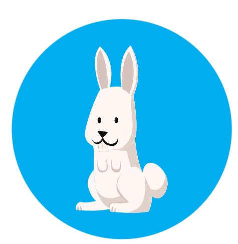
31		33		35
	37		39	

Alternatively, this activity can be completed on one recording sheet showing 1-40 (example shown below).

1	2			5	6		8		10
	12	13		15			18	19	
21			24		26	27		29	30
		33	34			37			







Race to 40

This game can be played by 2-4 players. To prepare, create or print out **game boards** as shown below. Write numbers 1-40 in circles on a winding path around the game board. Write tens numbers in larger circles. Create **5 tortoise and 5 hare cards** for each group (examples shown below). Each group will need a **different counter or game piece** for each player. Tortoise and hare cards are shuffled and placed face down. All students start at 1 and take turns turning over a card. If a tortoise card is turned over, the student moves 1 space. If a hare card is turned over, the student moves 10 spaces. Once everyone has turned over a card and moved their game piece, the first student turns over a second card and students continue playing in order. When all cards are used, a student should shuffle them and turn them face down again. The first player to reach 40 wins!



Tower of Tens

In this activity, students create a tower of cups to help them count from 0-40. Each student need **5 Styrofoam cups** and **pens or markers** (different colors, if possible). Students take one cup, turn it upside down, and write 0 on the lip as shown below. Turn the second cup upside down and write 10 on the lip. Third cup: 20. Fourth cup: 30. Last cup: 40. On each cup, students should write the numbers 1-9 from the lip of the cup to the bottom of the cup as shown. When finished, students can use their cups to practice counting from 0 to 40.

KINDERGARTEN II

Mathematics

CHAPTER 1

Lessons 1-10

Overview

Lessons 1-10

COMPONENT	DESCRIPTION	TIME
Calendar and Movement	During this daily routine, students develop number sense, calendar sense, early place value concepts, counting fluency, and problem-solving skills. Students explore quantity and practice counting through patterns and movement.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from colleagues' perspectives.	5-10 minutes

Learning Indicators

Throughout this chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY:

- Count objects to tell how many there are
- Count by ones up to 15, as a symbol, meaning, comparing arranging
- Make equivalent (equal) sets
- Write numbers and represent quantities up to 20
- Count by ones to 20

OPERATIONS AND ALGEBRAIC THINKING:

- Classify objects by their attributes (color, size, and shape)

GEOMETRY:

- Correctly use terms such as above, below, besides, in front of, behind, and next to
- Correctly name 2-dimensional shapes (circle, triangle, square, rectangle)

CH 1 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
1	**Students will:** • Identify the month, day, and date. • Count to 3. • Count objects to tell how many there are to the number. • Use the terms “above” and “below.”
2	**Students will:** • Identify the month, day, and date. • Count to 3. • Count objects to tell how many there are to the number 3 and make an equivalent set. • Use terms “above” and “below.” • Name a circle.
3	**Students will:** • Identify the month, day, and date. • Count to 4. • Use terms “above” and “below.” • Name a circle.
4	**Students will:** • Identify the month, day, and date. • Count to 4. • Count objects to tell how many there are to the number 4 and make an equivalent set. • Use terms “above” and "below." • Name a circle.
5	**Students will:** • Identify the month, day, and date. • Count to 5. • Use the terms “above” and “below.” • Name a circle.
6	**Students will:** • Identify the month, day, and date. • Count to 5. • Count objects to tell how many there are to the number 5 and make an equivalent set. • Use terms “above” and "below." • Name a circle and a triangle.
7	**Students will:** • Identify the month, day, and date. • Count to 5. • Count objects to tell how many there are to the number 5 and make an equivalent set. • Use terms “above” and "below." • Name a circle and a triangle. • Record mathematical thinking.

LESSON	INSTRUCTIONAL FOCUS
8	**Students will:** • Identify the month, day, and date • Count to 5. • Count objects to tell how many there are to the number 5 and make an equivalent set. • Use terms “above” and "below." • Name a square. • Record mathematical thinking.
9	**Students will:** • Identify the month, day, and date. • Count to 5. • Use terms “above” and "below." • Name shapes. • Represent the number 1 in words and pictures. • Record mathematical thinking.
10	**Students will:** • Identify the month, day, and date • Count to 5. • Use terms “above” and "below." • Name shapes. • Represent the number 2 in words and pictures. • Record mathematical thinking.

Term/Theme Preparation for the Teacher

Note to the Teacher: The following items will be used in some form throughout your theme daily. Careful preparation of them in advance is necessary for successful implementation of daily lessons.

- Create **Calling Sticks**: Write the name of each student on a wooden stick. Store them in a cup or jar.
- Create a Calendar Math area in your classroom. The Calendar Math area should include the following:
  - Large calendar
  - A place to write the date each day
  - A number chart to 100

Note to the Teacher: The Calendar Math area will be used daily.

- Create student math journals.
  - Students may use a pre-made notebook or you can create a journal by stapling or clipping a few sheets together for each student.

Note to the Teacher: Decide where you will store math journals in your classroom. It should be a place where you or your students can get to them quickly. Some days, you may wish to do a quick check of students' journals to determine who may need extra instruction or help. Other days, you may wish to do a more formal review of students' work.

Lesson 1 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Identify the month, day, and date. • Count to 3. • Count objects to tell how many there are to the number. • Use the terms "above" and "below."	• Calendar • Month • Day • One • Math Journal • Share	Gather objects of different sizes and colors for students to count (up to 3) and compare. Examples: beans, dry pasta, small stones, buttons, math counters, connecting cubes

MATERIALS

Calendar Math Area

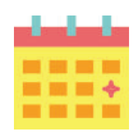


Math Journal and Pencil



Objects of different sizes and colors for students to count (up to 3) Examples: beans, rocks, marbles, straws





Calendar and Movement Math (15-20 mins)

Directions

Note to the Teacher: Today you will be introducing the daily math routine to students. This begins with Calendar time.

1. TEACHER SAY: The calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days, such as your birthday and holidays. Every day we will be practicing our math skills using a calendar.

Note to the Teacher: Each day you will you point out the name of the month. This repetition will help students to learn the names of the months of the year.

2. TEACHER DO: Point to the month at the top of the calendar.

TEACHER SAY: We are in the month of (current month).

 **STUDENTS DO:** Repeat the month.

Note to the Teacher: Each day you will you point out the days of the week. This repetition will help students to learn the names of the days.

3. TEACHER DO: Point to each day of the week as you name them. Allow time for student repetition.

TEACHER SAY: Repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday

 **STUDENTS DO:** Repeat the names of the days.

Note to the Teacher: This activity builds students' counting and cardinality skills. It is ok if students do not know all the numbers on day one. Those that can, will count along. The repetition daily will allow the others to notice the pattern of counting, and build their ability to join in.

4. TEACHER DO: Point to each day of the week while counting each day.

TEACHER SAY: Let's count each day of the week. I am going to point to each day and count them. Count along with me!

 **STUDENTS DO:** Count along with the teacher.

TEACHER SAY: The last number we counted tells us how many days there are in a week. How many days are there in a week?

 **STUDENTS DO:** Answer the question – 7.

Note to the Teacher: Students may not know what the numbers on the calendar mean. Explain to students that the numbers tell them the current date and how many days are in each month. The current date also tells how many days have passed in the current month.

5. TEACHER DO: Point to the numbers on the calendar.

TEACHER SAY: Look at the numbers on the calendar. Each day has its own number. This tells you the number of days that have happened so far in the month.

TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (date) of (month) (year). Students can you say the date too?

 **STUDENTS DO:** Repeat the date.

6. TEACHER SAY: I am going to look around the classroom and find an object to count. I only want to count one object. Oh! Look! Here is one _______ (classroom object).

TEACHER DO: As you are talking to the students, pick up one object in the classroom. It could be a book or a pencil or anything else that is easy to pick up.

TEACHER SAY: Now it's your turn to count one of something. Stand up and find an object to count. When you find it, point to it and say, "One." Then return to your seat.

 **STUDENTS DO:** Walk around the room and find 1 of something to count and then return to their seats.

TEACHER DO: Using **Calling Sticks**, select 4 students to share what they found.



Learn (25-30 mins)

Directions

1. TEACHER SAY: I was cleaning my house and found some special items I didn't want to throw away.

TEACHER DO: Hold the objects in the air one at a time and say the name of each item.

TEACHER SAY: Can you help me count the objects? 1, 2, 3.

2. TEACHER DO: Using your fingers to point to each object, count 1, 2, 3.



TEACHER SAY: How can we show 3 using our fingers?

TEACHER DO: Using your fingers, model how to count 1, 2, 3.

3. TEACHER DO: Ask students the questions below. Have them share their answers to each question with a **Shoulder Partner**.

TEACHER SAY:

- **How are these items alike?**
- **How are they different?**
- **Are they the same size?**
- **Which one is the largest?**
- **Which one is the smallest?**
- **What color is each object?**

 **STUDENTS DO:** Share answers with their shoulder partners.

TEACHER SAY: Who would like to share their comparisons with the class?

 **STUDENTS DO:** Raise hands to volunteer. Selected students share their thinking.

4. TEACHER DO: Use **Calling Sticks** to choose 3 different students to stand in the front of the room.

TEACHER SAY: Using your fingers and counting out loud, how many students are up here right now?

TEACHER DO: Touch each student on the head or hover your hand over their head as the class counts.

 **STUDENTS DO:** Count to three verbally and physically using their fingers and as the teacher touches or hovers over each individual student.

TEACHER SAY: Using your fingers and counting out loud, how many boys are in this group?

 **STUDENTS DO:** Respond with fingers and verbally.

TEACHER SAY: Using your fingers and counting out loud, how many girls are in this group?

 **STUDENTS DO:** Respond with fingers and verbally.

5. TEACHER SAY: With your Shoulder Partner, talk about how all 3 students are the same and how they are different.

 **STUDENTS DO:** Discuss answers with **Shoulder Partner**.

TEACHER DO: Using **Calling Sticks**, call on students to share their thinking.

 **STUDENTS DO:** Selected students share their thinking about how the objects are the same and different.

6. TEACHER DO: Draw 3 shapes on the board: a circle, a square, another circle. Counting 1, 2, 3 as you draw.

TEACHER SAY: I drew 3 shapes on the board. Help me double check that I have three. Count with me.

TEACHER DO: Touch each shape as you and students count out loud.

 **STUDENTS DO:** Count aloud with the teacher.

7. TEACHER SAY: With your Shoulder Partner, decide if these shapes look alike or if they look different? What makes them same? What makes them different?

 **STUDENTS DO:** Discuss answers with **Shoulder Partner**.

TEACHER DO: Using **Calling Sticks**, call on students to share their thinking.

 **STUDENTS DO:** Selected students share their thinking about how the objects are the same and different.



Share (5-10 mins)

Directions

Note to the Teacher: Students will have the opportunity each day to talk about what they have learned during the lesson. Reflecting on what students have learned and sharing it which others helps make the learning concrete. Students will learn from hearing how classmates think about math concepts, and gain confidence in their understanding of math concepts.

1. TEACHER SAY: At the end of each lesson you will talk or share about what you learned and ask questions. We counted to 3 several times today. What did you see me do when I was counting to make sure I counted correctly? Turn and talk to your Shoulder Partner.

 **STUDENTS DO:** Turn and talk to their **Shoulder Partners**.

2. TEACHER SAY: Raise your hand if you think you know what I did to make sure I counted correctly.

 **STUDENTS DO:** Raise hands to answer the question. Selected students respond.

3. TEACHER SAY: One thing I did as I was counting was touch each object. I touched my fingers, I touched the objects, and I touched the shapes. That helped me make sure I counted correctly. What do you do when you count to make sure you are counting correctly?

TEACHER DO: Use Counting Sticks to select students to share their counting strategies.

 **STUDENTS DO:** Selected students share their counting strategies.

TEACHER DO: Take note of students who describe effective strategies. Those students may be able to help other students who struggle with counting.

Lesson 2 Overview

OUTCOMES

Students will:

- Identify the month, day, and date.
- Count to 3.
- Count objects to tell how many there are to the number 3 and make an equivalent set.
- Use terms “above” and "below."
- Name a circle.

KEY VOCABULARY

- Calendar
- Month
- Day
- Above
- Below
- Circle
- Share

LESSON PREPARATION FOR THE TEACHER

Gather sets of 3 objects to use as counters (or one set per student)

MATERIALS

Calendar Math Area



Math Journal and pencil



Beans or other small objects to use for counting, enough for every student (and yourself) to have 3





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER SAY: The calendar helps us keep track of days, weeks, and months in a year. It also helps ua keep track of special days such as your birthday and holidays. Every day we will be practicing our math skills using a calendar.

TEACHER SAY: We are in the month of (current month). Now you say the month.

 **STUDENTS DO:** Repeat the month.

2. TEACHER DO: Point to each day of the week as you name them.

TEACHER SAY: Repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

 **STUDENTS DO:** Repeat the names of the days of the week.

6. TEACHER DO: Count the days of the week aloud, pointing to each day.

TEACHER SAY: How many days are there in a week?

 **STUDENTS DO:** Answer the question – 7.

7. TEACHER DO: Point to the numbers on the calendar.

TEACHER SAY: **What are the numbers on the calendar?**



STUDENTS DO: Raise hands to answer the question. Selected student explains that the number show dates and how many days are in each month.

TEACHER DO: If no students are able to answer, explain the purpose of the numbers. Point to today's date on the calendar.

TEACHER SAY: **Today is (day) the (date) of (month) (year). Now you say the date.**



STUDENTS DO: Repeat the date.

8. TEACHER DO: Prepare for Movement Math.

TEACHER SAY: **Every day we will do math by moving our bodies. Let's try a pattern clap today. A pattern is something that repeats. In today's pattern, we will count 1, 2, 3. First, I will clap my hands one time and say the number 1, then I will clap my knees one time and say the number 1. I will repeat the pattern for 2 and 3. Join me when you understand the pattern.**

TEACHER DO: Clap hands and say 1, clap knees and say 1, clap hands and say 1, clap knees and say 2, clap hands and say 3, clap knees and say 3.



STUDENTS DO: Join the teacher in the movement and counting pattern.

TEACHER DO: Repeat the pattern multiple times until all students follow along.

TEACHER SAY: **Great job! Turn to your Shoulder Partner, clap twice and say, "Wooo!"**

9. TEACHER DO: Model the next movement while explaining it to students.

TEACHER SAY: **Now, watch as I put my hands above my head and say the word above, now I will move them below my knees and say below. Join me when you understand the pattern.**



STUDENTS DO: Join the teacher in the movement and word pattern.

TEACHER DO: Continue the pattern multiple times until all students understand and copy the movements and words.



Learn (25-30 mins)

Directions

1. TEACHER SAY: **Today we are going to practice counting up to 3 using beans.**

TEACHER DO: Hold the beans so the students can see them all. Touch each one while counting 1, 2, 3.



STUDENTS DO: Observe as the teacher counts.

TEACHER SAY: **Notice that each time I touch a bean I say its number. Watch as I double check by recounting each bean.**

2. TEACHER SAY: **Count with me.**



STUDENTS DO: Count with the teacher.

TEACHER DO: Repeat several times. Observe students as they count.



STUDENTS DO: Count with the teacher.

3. TEACHER DO: Draw one circle on the board.

TEACHER SAY: This shape is called a circle. A circle is a flat shape made up of a curved line. Where have you seen a circle?

 **STUDENTS DO:** Raise hands to talk about circles in nature and in their lives.

4. TEACHER SAY: This time I am going to draw a circle around each bean with my finger as I count. Please count with me and draw a circle in the air.

 **STUDENTS DO:** Draw circles in the air as they count to 3.

5. TEACHER DO: Hand out 3 beans to each student.

TEACHER SAY: Count your own beans first by touching each one and then by drawing a circle around it with your finger.

 **STUDENTS DO:** Count their beans. Count them again while drawing circles around them with their fingers.

6. TEACHER SAY: Let's do it again, but this time check your Shoulder Partner's work.

 **STUDENTS DO:** Working with their **Shoulder Partner**, have students take turns counting the beans for each other.



Share (5-10 mins)

Directions

1. TEACHER SAY: At the end of each lesson you will talk about or share what you learned. Sometimes I will ask you questions. Sometimes you will ask questions!

TEACHER DO: Close the lesson by using **Calling Sticks** to select 3 students to talk about objects that are circles.

 **STUDENTS DO: Selected students talk about objects that are circles.**

Lesson 3 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Identify the month, day, and date. • Count to 4. • Use terms “above” and "below." • Name a circle.	• Calendar • Month • Day • Above • Below • Four • Circle • Share	Gather 4 objects of different sizes and colors. Gather sets of 4 objects for students to count (one set per student). Examples: beans, dry pasta, small stones, buttons, math counters, connecting cubes

MATERIALS: same as Day 2, plus:

Calendar Math Area



4 objects of different sizes and colors. Examples: beans, rocks, marbles, straws





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER SAY: The calendar helps us keep track of dasy, weeks, and months in a year. It also helps us keep track of special days, such as your birthday and holidays.

TEACHER SAY: We are in the month of (current month). Now you say the month.

 **STUDENTS DO:** Repeat the month.

2. TEACHER DO: Point to each day of the week as you name them.

TEACHER SAY: Repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

 **STUDENTS DO:** Repeat the names of the days of the week.

3. TEACHER DO: Count the days of the week aloud, pointing to each day.

TEACHER SAY: How many days are there in a week?

 **STUDENTS DO:** Answer the question – 7.

4. TEACHER DO: Point to the numbers on the calendar

TEACHER SAY: What are the numbers on the calendar?



STUDENTS DO: Raise hands to answer the question. Selected student explains that the number show dates and how many days are in each month.

TEACHER DO: If no students are able to answer, explain the purpose of the numbers. Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (date) of (month) (year). Now you say the date.



STUDENTS DO: Repeat the date.

5. TEACHER DO: Prepare for movement math.

TEACHER SAY: Let's try another new pattern today. A pattern is something that repeats. First, I will count to 3, clapping my hands once for each number. Then I will count to 3, clapping my knees for each number. Watch me, then join in when you understand the pattern.

TEACHER DO: Repeat the pattern multiple times until all students follow along.



STUDENTS DO: Join the teacher in the movement and counting pattern.

6. TEACHER SAY: Now, I'll do a new pattern. Watch as I put my hands above my head and say above and clap twice, now I will move them below my knees, say below and clap twice. Watch me, then join in when you understand the pattern.

TEACHER DO: Repeat the pattern multiple times until all students show they understand by repeating the movement and words.



STUDENTS DO: Join the teacher in the movement and word pattern.



Learn (25-30 mins)

Directions

1. TEACHER SAY: I was cleaning my house and found some more special objects I did not want to throw away.

Note for the Teacher: This story is included as an example. If you used a different story on Day 1, continue that story here.

TEACHER DO: Hold the four objects in the air one at a time and say the name of each item.

2. TEACHER SAY: Can you help me count the objects?

TEACHER DO: Using your fingers to point to each object, counting to 4.



STUDENT DO: Count to 4 on their fingers with the teacher.

TEACHER SAY: How can we show 4 using our fingers?

TEACHER DO: Using your fingers, model how to count 1, 2, 3, 4.

TEACHER SAY: Show me on your fingers how many special objects there are.



STUDENTS DO: Count to 4 on their fingers and hold up 4 fingers.

3. TEACHER DO: Ask students the questions below. Have them share their answers to each question with a **Shoulder Partner**.

TEACHER SAY:

- **How are these items alike?**
- **How are they different?**
- **Are they the same size?**
- **Which one is the largest?**
- **Which one is the smallest?**
- **What color is each object?**

STUDENTS DO: Share answers with their shoulder partners.

TEACHER SAY: Who would like to share their comparisons with the class?

STUDENTS DO: Raise hands to volunteer. Selected students share their thinking.

4. TEACHER DO: Using **Calling Sticks**, select 4 students to stand at the front of the room.

TEACHER SAY: Count the students as I touch their heads.

STUDENTS DO: Count verbally in unison as the teacher touches the students on the head.

TEACHER SAY: Using your fingers, show many students are at the front of the room right now.

STUDENTS DO: Hold up 4 fingers.

TEACHER SAY: Hold up fingers to show how many girls are in this group.

STUDENTS DO: Hold up fingers to show how many girls are in the group.

TEACHER SAY: Hold up fingers to show how many boys are in this group.

STUDENTS DO: Hold up fingers to show how many girls are in the group.

4. TEACHER SAY: How are these 4 students alike? How are the students different? Talk to your Shoulder Partner about your thinking.

STUDENTS DO: Share their thinking with their **Shoulder Partners**.

5. TEACHER DO: Draw 4 shapes on the board: circle, circle, circle, square, counting 1, 2, 3, 4 aloud as you draw.

TEACHER SAY: I drew 4 shapes on the board: a circle, a circle, a circle, and a square. Help me double check that I have four. Count with me as I touch each shape.

STUDENTS DO: Count the shapes with the teacher.

TEACHER SAY: Do all these shapes look alike? What makes the shapes different?

STUDENTS DO: Raise their hands to volunteer. Selected students share their thinking with the class.

6. TEACHER DO: Draw 4 circles on the board. Counting aloud 1, 2, 3, 4 as you draw.

TEACHER SAY: I drew 4 circles on the board. Help me double check that I have four. Count with me as I touch each circle. Now let's trace four circles in the air together.

STUDENTS DO: Count the shapes with the teacher.

TEACHER SAY: Great job counting to 4 today!



Share (5-10 mins)

Directions

1. TEACHER SAY: At the end of each lesson you will talk about or share what you learned. Sometimes I will ask you questions. Sometimes you will ask questions! Today I want to review some of the counting we've learned.

Can everyone hold up 1 finger? 2 fingers? 3 fingers? 4 fingers? Practice with your Shoulder Partner.



STUDENT DO: Practice counting to four with **Shoulder Partners**.

TEACHER DO: Close the lesson by using **Calling Sticks** to ask 4 students to share something they did or learned today during math.

Lesson 4 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Identify the month, day, and date. • Count to 4. • Count objects to tell how many there are to the number 4 and make an equivalent set. • Use terms "above" and "below." • Name a circle.	• Calendar • Month • Day • Above • Below • Circle • Share	Gather 4 objects of different sizes and colors. Gather sets of 4 objects for students to count (one set per student). Examples: beans, dry pasta, small stones, buttons, math counters, connecting cubes

MATERIALS

Calendar Math Area



Math journal and pencil



Objects of different sizes and colors for students to count (up to 4)





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER SAY: The calendar helps us keep track of dasy, weeks, and months in a year. It also helps us keep track of special days, such as your birthday and holidays. Every day we will be practicing our math skills using a calendar.

TEACHER SAY: We are in the month of (current month). Now you say the month.

 **STUDENTS DO:** Repeat the month.

2. TEACHER DO: Point to each day of the week as you name them.

TEACHER SAY: Repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

 **STUDENTS DO:** Repeat the names of the days of the week.

3. TEACHER DO: Count the days of the week aloud, pointing to each day.

TEACHER SAY: How many days are there in a week?

 **STUDENTS DO:** Answer the question – 7.

4. TEACHER DO: Point to the numbers on the calendar

TEACHER SAY: What are the numbers on the calendar?



STUDENTS DO: Raise hands to answer the question. Selected student explains that the number show dates and how many days are in each month.

TEACHER DO: If no students are able to answer, explain the purpose of the numbers.

5. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (date) of (month) (year). Now you say the date.



STUDENTS DO: Repeat the date.

6. TEACHER DO: Prepare for movement math.

TEACHER SAY: Let's try another new pattern today. First, I will pat my head three times as I say the numbers 1, 2, 3 for each pat. Then I will tap my toes three times as I say the numbers 1, 2, 3 for each tap. Watch me and join in when you understand the pattern.

TEACHER DO: Repeat the pattern multiple times until all students follow along.



STUDENTS DO: Join the teacher in the movement and counting pattern.

TEACHER SAY: Now, I'll do a new pattern. Watch as I put my hands above my head and say above and clap three times, now I will move them below my knees, say below and clap three times. Watch me and join in when you understand the pattern.

TEACHER DO: Repeat the pattern multiple times until all students show they understand by repeating the movement and words.



STUDENTS DO: Join the teacher in the movement and word pattern.



Learn (25-30 mins)

Directions

1. TEACHER SAY: Today we are going to count to 4 using beans.

TEACHER DO: Hold the beans so the students can see them all. Touch each one while counting aloud 1,2,3,4.

TEACHER SAY: Notice that each time I touch a bean, I say its number. Watch as I double check by recounting each bean.



STUDENTS DO: Observe as the teacher counts.

2. TEACHER DO: Hand out beans so that each student gets four beans.

TEACHER SAY: Count your own beans first by touching each one and then by drawing a circle around each one with your finger.



STUDENTS DO: Count their beans by touching them, then by drawing a circle around each one.

3. TEACHER SAY: We're going to count again. This time work with your Shoulder Partner to count your beans. Each time you finish counting them, rearrange them and count them again.



STUDENTS DO: Work with shoulder partners. Take turns counting the beans for each other. Rearrange the beans on the table before counting each time.

TEACHER SAY: You and your partner rearranged your beans before you counted each time.

Did that change how many beans you had?



STUDENTS DO: Raise their hands to volunteer. Selected students respond and share their thinking.

TEACHER DO: When all students have counted the beans multiple times, collect the beans and store them for another day.

4. TEACHER SAY: **Stand up behind your tables. Who remembers what a circle is? Show me a circle with your hands.**



STUDENTS DO: Stand and make a circle with their hands.

TEACHER SAY: **Can you make a circle with your arms above your head?**



STUDENTS DO: Make a circle above their heads using their arms.

TEACHER SAY: **Raise your arms out to the side. Can you move your arms in circles?**



STUDENTS DO: Make circular motions with their arms.

TEACHER SAY: **Lower your arms again and turn to your Shoulder Partner. How can you make a circle with your Shoulder Partner?**



STUDENTS DO: Make a circle with their **Shoulder Partner** (Note for the teacher: There are multiple ways to do this. Allow students to get creative.)



Share (5-10 mins)

Directions

1. TEACHER SAY: **At the end of each lesson you will talk about or share what you learned. Sometimes I will ask you questions. Sometimes you will ask questions!**

2. TEACHER DO: Close the lesson by using **Calling Sticks** to ask 4 students to share how they made a circle with their **Shoulder Partner**.



STUDENTS DO: Selected students share how they made a circle.

Lesson 5 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Identify the month, day, and date • Count to 5. • Use the terms “above” and "below." • Name a circle.	• Calendar • Month • Day • Above • Below • Five • Circle • Share	Gather 5 objects of different sizes and colors.

MATERIALS

Calendar Math Area



Math journal and pencil



5 objects of different sizes and colors





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER SAY: The calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days such as your birthday and holidays.

TEACHER SAY: We are in the month of (current month). Now you say the month.

 **STUDENTS DO:** Repeat the month.

2. TEACHER DO: Point to each day of the week as you name them.

TEACHER SAY: Repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

 **STUDENTS DO:** Repeat the names of the days of the week.

3. TEACHER DO: Count the days of the week aloud, pointing to each day.

TEACHER SAY: How many days are there in a week?

 **STUDENTS DO:** Answer the question – 7.

4. TEACHER DO: Point to the numbers on the calendar

TEACHER SAY: What are the numbers on the calendar?

 **STUDENTS DO:** Raise hands to answer the question. Selected student explains that the number show dates and how many days are in each month.

TEACHER DO: If no students are able to answer, explain the purpose of the numbers.

5. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (date) of (month) (year). Now you say the date.

 **STUDENTS DO:** Repeat the date.

6. TEACHER DO: Prepare for movement math.

TEACHER SAY: First, I will clap my hands 4 times and say the numbers 1, 2, 3, 4 for each clap. Then I will clap my knees 4 times and say the numbers 1, 2, 3, 4 for each clap. Watch me and join in when you understand the pattern.

TEACHER DO: Repeat the pattern multiple times until all students follow along.

 **STUDENTS DO:** Join the teacher in the movement and counting pattern.

7. TEACHER SAY: Now, watch as I put my hands above my head and say above and clap 4 times, now I will move them below my knees, say below and clap 4 times. Watch me and join in when you understand the pattern.

TEACHER DO: Repeat the pattern multiple times until all students show they understand by repeating the movement and words.

 **STUDENTS DO:** Join the teacher in the movement and word pattern.



Learn (25-30 mins)

Directions

1. TEACHER SAY: I found some more special objects (or continue the story started on Day 1).

TEACHER DO: Hold the objects in the air one at a time and say the name of each item.

TEACHER SAY: Can you help me count the objects? 1, 2, 3, 4, 5

TEACHER DO: Using your fingers to point to each object, count 1, 2, 3, 4, 5.



 **STUDENTS DO:** Count along with teacher.

2. TEACHER SAY: How can we show 5 using our fingers?

TEACHER DO: Using your fingers, model how to count 1, 2, 3, 4, 5.

TEACHER SAY: Show me on your fingers how many special objects there are.

 **STUDENT DO:** Hold up their hands to show 5 fingers.

3. TEACHER DO: Ask students the questions below. Have them share their answers to each question with a **Shoulder Partner**.

TEACHER SAY:

- **How are these items alike?**
- **How are they different?**
- **Are they the same size?**

- **Which one is the largest?**
- **Which one is the smallest?**
- **What color is each object?**

 **STUDENTS DO:** Share answers with their shoulder partners.

TEACHER SAY: Who would like to share their comparisons with the class?

STUDENTS DO: Raise hands to volunteer. Selected students share their thinking.

4. TEACHER DO: Using **Calling Sticks**, select 5 students to stand at the front of the room.

TEACHER SAY: How many students are at the front of the room? Let's count together.

TEACHER DO: Touch each student on the head.

STUDENTS DO: Count aloud as each student is touched on the head.

5. TEACHER SAY: Tell your Shoulder Partner how many boys and how many girls are up here.

STUDENTS DO: Count the number of boys and the number of girls. Compare their answers with their partners'.

TEACHER SAY: Who would like to share their answers?

STUDENTS DO: Raise hands to answer the question. Selected students share answers.

6. TEACHER SAY: How are these 5 students alike? How are the students different?

STUDENTS DO: Talk to their **Shoulder Partners** about how the students are alike and different.

TEACHER SAY: Who would like to share their thinking?

 **STUDENTS DO:** Raise hands to answer the question. Selected students share thinking with the class.

7. TEACHER DO: Draw 5 shapes on the board: circle, triangle, circle, triangle, square. Count aloud 1, 2, 3, 4, 5 as you draw.

TEACHER SAY: I drew 5 shapes on the board. Help me double check that I have five. Count with me as I touch each shape.

STUDENTS DO: Count along with the teacher.

8. TEACHER DO: Ask the questions below. Direct students to share their thinking with their **Shoulder Partners**.

TEACHER SAY: Do all these shapes look alike? What makes the shapes different? How many circles did I draw?

 **STUDENTS DO:** Discuss their answers with their **Shoulder Partners**.

TEACHER DO: Walk around the room to monitor students' conversation and correct misconceptions. Take note of students who may need additional instruction.



Share (5-10 mins)

Directions

1. **TEACHER SAY:** **It's the end of our lesson! That means you get to share what you have learned with one another. Lets practice counting with our shoulder partners. How many fingers do you have on one hand?**

 **STUDENTS DO:** Count the fingers on one hand and call out their answers.

2. **TEACHER SAY:** **Can everyone hold up 1 finger? 2 fingers? 3 fingers? 4 fingers? 5 fingers?**

 **STUDENTS DO:** Hold up their fingers in response to the question.

3. **TEACHER DO:** Close the lesson by using **Calling Sticks** to ask 5 students to share something they did or learned today during math.

Lesson 6 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Identify the month, day, and date. • Count to 5. • Count objects to tell how many there are to the number 5 and make an equivalent set. • Use terms "above" and "below." • Name a circle and a triangle.	• Calendar • Month • Day • Above • Below • Triangle • Corner • Side	Gather sets of 5 objects for students to use as counters (one set per student) Examples: beans, dry pasta, small stones, buttons, math counters, connecting cubes

MATERIALS

Calendar Math Area



Math journal and pencil



Counting beans: 5 for teacher and 5 per student



Calendar and Movement Math (15-20 mins)

Directions

1. **TEACHER SAY: The calendar helps us keep track of dasy, weeks, and months in a year. It also helps us keep track of special days, such as your birthday and holidays. Every day we will be practicing our math skills using a calendar.**

TEACHER SAY: We are in the month of (current month). Now you say the month.

 **STUDENTS DO:** Repeat the month.

2. **TEACHER DO:** Point to each day of the week as you name them.

TEACHER SAY: Repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

3. **TEACHER DO:** Count the days of the week aloud, pointing to each day. Ask:

TEACHER SAY: How many days are there in a week? If you know the answer please stand up.

 **STUDENTS DO:** Stand up if they know the answer.

TEACHER DO: Call on a standing student to answer the question.

 **STUDENTS DO:** Selected student answers the question.

4. TEACHER DO: Point to the numbers on the calendar

TEACHER SAY: What are the numbers on the calendar?



STUDENTS DO: Raise hands to answer the question. Selected student explains that the number show dates and how many days are in each month.

TEACHER DO: If no students are able to answer, explain the purpose of the numbers. Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (date) of (month) (year). Now you say the date.



STUDENTS DO: Repeat the date.

5. TEACHER DO: Prepare for movement math.

TEACHER SAY: First, will clap my hands 5 times and count each clap out loud, saying 1, 2, 3, 4, 5 for each clap. Then I will clap my knees 5 times and say the numbers 1, 2, 3, 4, 5 for each knee clap. Watch me and join in when you understand the pattern.

TEACHER DO: Repeat the pattern multiple times until all students follow along.



STUDENTS DO: Join the teacher in the movement and counting pattern.

6. TEACHER SAY: Now, I'll do a new pattern. Watch as I put my hands above my head and say above and clap 5 times, now I will move them below my knees, say below and clap 5 times. Watch me and join in when you understand the pattern.

TEACHER DO: Repeat the pattern multiple times until all students show they understand by repeating the movement and words.



STUDENTS DO: Join the teacher in the movement and word pattern.



Learn (25-30 mins)

Directions

1. TEACHER SAY: Today we are going to practice counting up to 5 using beans.

TEACHER DO: Hold the beans so the students can see them all. Touch each one while counting aloud 1, 2, 3, 4, 5.

TEACHER SAY: Notice that each time I touch a bean I say its number. Watch as I double check by recounting each bean.



STUDENTS DO: Observe as the teacher counts.

TEACHER SAY: Count them with me this time.



STUDENT DO: Count along with teacher.

2. TEACHER DO: Draw a triangle on the board.

TEACHER SAY: This shape is called a triangle. A triangle is a flat shape that has three sides and three corners.

TEACHER DO: Point to the sides of the triangle and the corners.

TEACHER SAY: A corner is made where the sides of the triangle come together. Where have you seen triangles?

STUDENTS DO: Raise hands to volunteer. Selected students talk about triangles in their lives.

3. TEACHER SAYS: **This time I am going to draw a triangle around each bean with my finger as I count. Please count with me and draw a triangle in the air.**



STUDENTS DO: Count with the teacher and draw triangles in the air.

TEACHER DO: Challenge students to create a triangle in multiple ways.

4. TEACHER SAY: **Stand up behind your tables. Show me a triangle with your hands.**



STUDENTS DO: Stand and make a triangle with their hands.

TEACHER SAY: **Can you make a triangle with your arms?**



STUDENTS DO: Make a triangle using their arms.

TEACHER SAY: **Raise your arms out to the side. Can you move your arms in triangles?**



STUDENTS DO: Make triangular motions with their arms.

TEACHER SAY: **Lower your arms again and turn to your Shoulder Partner. How can you make a triangle with your Shoulder Partner?**



STUDENTS DO: Make triangles with their shoulder partner.

TEACHER SAY: **How is a triangle different from a circle?**



STUDENTS DO: Raise hands to volunteer. Selected students explain how triangles are different from circles.

5. TEACHER DO: Have students return to their seats, and hand out 5 beans to each student.

TEACHER SAY: **Count your beans first by touching them and then draw a triangle around each one with your finger.**



STUDENTS DO: Count their beans first by touching them, then by drawing a triangle around each one with their fingers.

TEACHER DO: Walk around the room to monitor students' work. Take note of students who may need additional instruction.

TEACHER SAY: **Count the beans for your Shoulder Partner.**



STUDENT DO: Counts beans for their **Shoulder Partners**.

TEACHER DO: When all students have counted the beans multiple times, collect the beans and store them for another day.



Share (5-10 mins)

Directions

1. TEACHER DO: Close the lesson by using **Calling Sticks** to ask a few students to come to the front of the classroom and demonstrate counting to five on their fingers and making circles and triangles with their hands.



STUDENTS DO: Selected students count to 5 on their fingers and make shapes with their hands.

Lesson 7 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Identify the month, day, and date. • Count to 5. • Count objects to tell how many there are to the number 5 and make an equivalent set. • Use terms “above” and "below." • Name a circle and a triangle. • Record mathematical thinking.	• Calendar • Month • Day • Circle • Triangle • Corner • Side

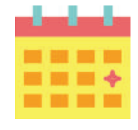
MATERIALS

Calendar Math Area



Math journal and pencil





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER SAY: The calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days, such as your birthday and holidays. Every day we will be practicing our math skills using a calendar.

TEACHER SAY: We are in the month of (current month). Now you say the month.

 **STUDENTS DO:** Repeat the month.

2. TEACHER DO: Point to each day of the week as you name them.

TEACHER SAY: Repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

 **STUDENTS DO:** Repeat the names of the days of the week.

3. TEACHER DO: Count the days of the week aloud, pointing to each day.

TEACHER SAY: How many days are there in a week?

 **STUDENTS DO:** Answer the question – 7.

4. TEACHER DO: Point to the numbers on the calendar

TEACHER SAY: What are the numbers on the calendar?

 **STUDENTS DO:** Raise hands to answer the question. Selected student explains that the number show dates and how many days are in each month.

TEACHER DO: If no students are able to answer, explain the purpose of the numbers. Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (date) of (month) (year). Now you say the date.

 **STUDENTS DO:** Repeat the date.

5. TEACHER DO: Prepare for movement math.

TEACHER SAY: First, I will clap my hands 1 time and say the number 1, then I will clap my knees 2 times and say 1, 2. Then I will clap my hands 3 times and say 1, 2, 3. I will repeat the pattern until I get to 5. Watch me and join in when you understand the pattern.

TEACHER DO: Repeat the pattern multiple times until all students follow along.

 **STUDENTS DO:** Join the teacher in the movement and counting pattern.

TEACHER SAY: Nice job! Now, turn to your Shoulder Partner and give them two claps and a "Woooo!"



Learn (25-30 mins)

Directions

1. TEACHER DO: Draw a triangle and a circle on the board.

TEACHER SAY: Today we are going to talk about shapes. This is a triangle. Remember it has three sides and three corners. This is a circle it has one curved line.

2. TEACHER DO: Hand out the math journals, saving one for yourself.

TEACHER SAY: This is a math journal. We will use your math journals to write or draw our thinking about math.

TEACHER DO: Hold up a math journal. Turn to the first page.

TEACHER SAY: Turn to the first page of the journal.

 **STUDENTS DO:** Open journals to the first page.

3. TEACHER SAY: Draw a circle at the top of the first page.

TEACHER DO: Model this in your math journal to show students how big to draw the circle. Then, walk around the room to help students who need assistance.

 **STUDENTS DO:** Draw a circle in their math journals.

TEACHER DO: Have students hold up their drawings. Call on a student to explain how they know it is a circle.

 **STUDENTS DO:** Selected students explain how they know it's a circle.

4. TEACHER SAY: Draw a triangle underneath the circle.

TEACHER DO: Modeling how to draw a triangle counting each side, and how to place it below the circle.

 **STUDENTS DO:** Draw a triangle in their math journals.

TEACHER DO: Have students hold up their drawings. Call on a student to explain how they know it is a triangle.

 **STUDENTS DO:** Selected students explain how they know it's a triangle.

5. TEACHER SAY: Draw another circle next to your first circle and another triangle next to your first triangle.

 **STUDENTS DO:** Draw another circle and triangle in their math journals.

6. TEACHER DO: With a **Shoulder Partner**, ask students the following questions:

TEACHER SAY: How many circles are on your page? Count them in a whisper.

 **STUDENTS DO:** Whisper count circles.

TEACHER SAY: You should have drawn 2 circles.

TEACHER SAY: How many triangles are on your page? Count them in a whisper.

 **STUDENTS DO:** Whisper count triangles.

TEACHER SAY: You should have drawn 2 triangles. How many shapes total did you draw on your page? Count them in a whisper.

 **STUDENTS DO:** Whisper count the total number of shapes they drew.

TEACHER SAY: You should have drawn 4 shapes all together. Great job!



Share (5-10 mins)

Directions

1. TEACHER DO: Close the lesson by using **Calling Sticks** to ask a few students to explain how a circle and triangle are the same and how they are different.

 **STUDENTS DO:** Selected students share their thinking.

Lesson 8 Overview

OUTCOMES

Students will:
- Identify the month, day, and date
- Count to 5.
- Count objects to tell how many there are to the number 5 and make an equivalent set.
- Use terms "above" and "below."
- Name a square.
- Record mathematical thinking.

KEY VOCABULARY

- Calendar
- Month
- Day
- Square
- Corner
- Side
- Equal

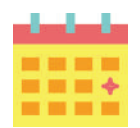
MATERIALS

Calendar Math Area



Math Journal and pencil





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER SAY: The calendar helps us keep track of days, weeks, and months in a year. It also helps us keep track of special days, such as your birthday and holidays. Every day we will be practicing our math skills using a calendar.

TEACHER SAY: We are in the month of (current month). Now you say the month.

 **STUDENTS DO:** Repeat the month.

2. TEACHER DO: Point to each day of the week as you name them.

TEACHER SAY: Repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

 **STUDENTS DO:** Repeat the names of the days of the week.

3. TEACHER DO: Count the days of the week aloud, pointing to each day.

TEACHER SAY: How many days are there in a week?

 **STUDENTS DO:** Answer the question – 7.

4. TEACHER DO: Point to the numbers on the calendar.

TEACHER SAY: What are the numbers on the calendar?



STUDENTS DO: Raise hands to answer the question. Selected student explains that the number show dates and how many days are in each month.

TEACHER DO: If no students are able to answer, explain the purpose of the numbers.

5. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (date) of (month) (year). Now you say the date.



STUDENTS DO: Repeat the date.

6. TEACHER DO: Prepare for movement math.

TEACHER SAY: First, I will clap my hands 2 times and say the numbers 1, 2, then I will clap my knees 3 times and say 1, 2, 3. Watch me, then join in when you understand the pattern.

TEACHER DO: Repeat the pattern multiple times until all students follow along.



STUDENTS DO: Join the teacher in the movement and counting pattern.

TEACHER SAY: Turn to your Shoulder Partner and give them two handshakes and three high-fives.



Learn (25-30 mins)

Directions

1. TEACHER DO: Draw a square on the board.

TEACHER SAY: Today we are going to continue learning about shapes. This is a square. A square is a flat shape that has four equal sides. Equal means that they're all the same size.

Help me count the sides as I touch them: 1, 2, 3, 4.

A square also has 4 corners where its sides come together and meet. Help me count the corners as I touch them: 1, 2, 3, 4.



STUDENTS DO: Count the sides and corners with the teacher.

2. TEACHER DO: Find an example of a square in the room (if possible) and point it out to students explaining why it is a square. Have students turn and tell their **Shoulder Partner** where they have seen squares.



STUDENTS DO: Talk to **Shoulder Partners** about where they have seen squares.

TEACHER DO: Using **Calling Sticks**, call on students to share where they have seen squares before.



STUDENTS DO: Share where they have seen squares.

3. TEACHER DO: Hand out the math journals, saving one for yourself. Hold up a math journal. Turn to the second page.

TEACHER SAY: Turn to the second page of your journal.



STUDENTS DO: Turn to the second page of their journals.

4. TEACHER SAY: Draw a square at the top of the page. Remember, we are just learning so it's okay if it is not perfect.

TEACHER DO: Model how to draw a square in your math journal. Then, walk around the room to help students who need assistance.

TEACHER SAY: **Double check your drawings and make sure you have 4 sides and four corners.**

TEACHER DO: Have students hold up their drawings.

STUDENTS DO: All students hold up their drawings.



4. TEACHER SAY: **Draw a second square beneath the first one.**

STUDENTS DO: Draw a second square in their journals.



TEACHER SAY: **Tell your Shoulder Partner how many squares are on your page.**

STUDENTS DO: Tell **Shoulder Partner** they drew 2 squares.



TEACHER SAY: **You should have drawn 2 squares.**

TEACHER DO: Have students hold up their drawings.



STUDENTS DO: All students hold up their drawings.

5. TEACHER SAY: **How do you know you drew a square? Who can explain how they know their drawing is a square?**



STUDENTS DO: Raise hands to volunteer. Selected student shows that their drawing has 4 equal sides and 4 corners.

TEACHER SAY: **Let's practice a little more. Draw 3 more squares in your math journal. Make sure they have 4 equal sides (that means all 4 sides are the same size) and 4 corners.**

TEACHER DO: Model how to draw a square again, if needed. Then, walk around the room to help students who need assistance. When students are finished, have students hold up their drawings.



STUDENTS DO: All students hold up their drawings.



Share (5-10 mins)

Directions

1. TEACHER DO: Close the lesson by asking students to talk to their **Shoulder Partners** about how circles, triangles, and squares are different.



STUDENTS DO: Talk to their **Shoulder Partners** about how circles, triangles, and squares are different.

TEACHER DO: Use **Calling Sticks** to select students to how circles, triangles, squares are different.



STUDENTS DO: Talk to the class about how circles, triangles, and squares are different.

Lesson 9 Overview

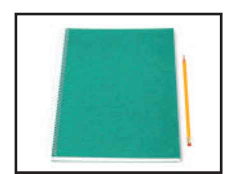
OUTCOMES	KEY VOCABULARY
Students will: • Identify the month, day, and date. • Count to 5. • Use terms “above” and "below." • Name Shapes. • Represent the number 1 in words and pictures. • Record mathematical thinking.	• Calendar • Month • Day • In front of • Behind • Square • One

MATERIALS

Calendar Math Area



Math journal and pencil





Calendar and Movement Math (15-20 mins)

Directions

1. **TEACHER SAY:** **The calendar helps us keep track of dasy, weeks, and months in a year. It also helps us keep track of special days, such as your birthday and holidays. Every day we will be practicing our math skills using a calendar.**

TEACHER SAY: **We are in the month of (current month). Now you say the month.**

 **STUDENTS DO:** Repeat the month.

2. **TEACHER DO:** Point to each day of the week as you name them.

TEACHER SAY: **Repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.**

 **STUDENTS DO:** Repeat the names of the days of the week.

3. **TEACHER DO:** Count the days of the week aloud, pointing to each day.

TEACHER SAY: **How many days are there in a week?**

 **STUDENTS DO:** Answer the question – 7.

4. **TEACHER DO:** Point to the numbers on the calendar

TEACHER SAY: **What are the numbers on the calendar?**

 **STUDENTS DO:** Raise hands to answer the question. Selected student explains that the number show dates and how many days are in each month.

TEACHER DO: If no students are able to answer, explain the purpose of the numbers.

5. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (date) of (month) (year). Now you say the date.

 **STUDENTS DO:** Repeat the date.

6. TEACHER DO: Prepare for movement math

TEACHER SAY: First, I will clap my hands 2 times and count 1, 2, then I will clap my knees 1 time and say 1. Those are the only numbers and movements I will do. Watch me and join in when you understand the pattern.

TEACHER DO: Repeat the pattern multiple times until all students follow along.

 **STUDENTS DO:** Join the teacher in the movement and counting pattern.

TEACHER SAY: Turn to your Shoulder Partner and give them two handshakes and one high-five.



Learn (25-30 mins)

Directions

1. TEACHER DO: On the board, write the numeral 1, write out the word "one," and draw 1 circle, 1 triangle, and 1 square.

TEACHER SAY: Today we are going to practice writing and showing the number 1. I can represent 1 in many ways, in words and in drawings. All the things I drew on the board show the number 1. Can you help me count to make sure I have 1?

TEACHER DO: Point to the word "one," then have students help count the 1 circle, 1 triangle, and 1 square.

 **STUDENTS DO:** Count with the teacher.

2. TEACHER DO: Hand out math journals and keep one for yourself. Have students turn to the next clean page.

 **STUDENTS DO:** Open math journals to the next clean page.

3. TEACHER SAY: Let's practice different ways to show the number 1 in your math journal. First, write the number 1 on the top and then copy my drawings.

 **STUDENTS DO:** Write 1 on the top of the page. Copy the teacher's drawings.

TEACHER SAY: When you have finished that, come up with your own ways to show the number 1.

 **STUDENTS DO:** Show 1 in their math journal in different ways (for example, by drawing 1 of different objects).

TEACHER DO: Walk around and monitor students' work. Take note of students who may need additional instruction.

TEACHER SAY: Hold up your drawings so everyone can see your great work!

 **STUDENTS DO:** All students hold up their drawings.

4. TEACHER DO: Collect the math journals and have students stand at their tables.

TEACHER SAY: We already know the words above and below. Now, let's learn two more place words. Let's start with in front.

TEACHER DO: Raise a hand straight in front of you at shoulder height.

TEACHER SAY: **My hand is in front of me. Stand up and raise your hands like mine. Now repeat after me: in front. Let's practice that again: Stand in front of your table.**



STUDENTS DO: Stand and raise their hands, saying in front with the teacher. Move to stand in front of their tables.

5. TEACHER DO: Put your hand behind you.

TEACHER SAY: **My hand is now behind me. Copy me what I am doing and repeat the word with me: behind. Since you are in front of the table, the table is behind you.**



STUDENTS DO: Put their hands behind their backs, saying behind with the teacher. Move to stand in front of their tables.

6. TEACHER DO: Have students return to their seats.

TEACHER SAY: **Is the table in front of or behind you now?**



STUDENTS DO: Answer in unison.



Share (5-10 mins)

Directions

1. TEACHER DO: Close the lesson by asking the students to hold up their work to show the classroom. Then use **Calling Sticks** to ask 3 students to come to the board and draw 1 of something.



STUDENTS DO: **Hold up their work to show their classmates. Selected student draw 1 of something on the board.**

Lesson 10 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Identify the month, day, and date • Count to 5. • Use terms “above” and "below." • Name Shapes. • Represent the number 2 in words and pictures. • Record mathematical thinking.	• Calendar • Month • Day • In front of • Behind • Two

MATERIALS

Calendar Math Area



Math journal and pencil





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER SAY: The calendar helps us keep track of dasy, weeks, and months in a year. It also helps us keep track of special days, such as your birthday and holidays. Every day we will be practicing our math skills using a calendar.

TEACHER SAY: We are in the month of (current month). Now you say the month.

 **STUDENTS DO:** Repeat the month.

2. TEACHER DO: Point to each day of the week as you name them.

TEACHER SAY: Repeat the name of the day after me: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

 **STUDENTS DO:** Repeat the names of the days of the week.

3. TEACHER DO: Count the days of the week aloud, pointing to each day.

TEACHER SAY: How many days are there in a week?

 **STUDENTS DO:** Answer the question – 7.

4. TEACHER DO: Point to the numbers on the calendar

TEACHER SAY: What are the numbers on the calendar?

 **STUDENTS DO:** Raise hands to answer the question. Selected student explains that the number show dates and how many days are in each month.

5. TEACHER DO: Point to today’s date on the calendar.

TEACHER SAY: Today is (day) the (date) of (month) (year). Now you say the date.

 **STUDENTS DO:** Repeat the date.

6. TEACHER DO: Prepare for movement math

TEACHER SAY: Every day we will do math by moving our bodies. Stand up and get ready to count! Today our pattern is this: I count 1 and I squat down. I count 2 and I stand up. I count 3 and I squat down. I repeat until I get to 5. Watch me, then join in when you understand the pattern.

TEACHER DO: Repeat the pattern multiple times until all students follow along.

 **STUDENTS DO:** Join the teacher in the movement and counting pattern.

TEACHER SAY: Turn to your Shoulder Partner and give them two claps and a "Woooo!"



Learn (25-30 mins)

Directions

1. TEACHER DO: On the board, write the numeral 2, write out the word "two," and draw 2 circles, 2 triangles, and 2 squares.

TEACHER SAY: Today we are going to practice writing and showing the number 2. I can represent 2 in many ways, in words and in drawings. All the things I drew on the board show the number 2. Can you help me count to make sure I have 2?

TEACHER DO: Point to the word "two," then have students help count the 2 circles, 2 triangles, and 2 squares.

 **STUDENTS DO:** Count with the teacher.

2. TEACHER DO: Hand out math journals and keep one for yourself. Have students turn to the next clean page.

 **STUDENTS DO:** Open math journals to the next clean page.

3. TEACHER SAY: Let's practice different ways to show the number 2 in your math journal. First, write the number 2 on the top and then copy my drawings.

 **STUDENTS DO:** Write 2 on the top of the page. Copy the teacher's drawings.

TEACHER SAY: When you have finished that, come up with your own ways to show the number 2.

 **STUDENTS DO:** Show 2 in their math journal in different ways (for example, by drawing 2 of different objects).

TEACHER DO: Walk around and monitor students' work. Take note of students who may need additional instruction.

TEACHER SAY: Hold up your drawings so everyone can see your great work!

 **STUDENTS DO:** All students hold up their drawings.

4. TEACHER DO: Have students stand at their tables. Using the **Calling Sticks**, choose 2 students to join you in the front of the room, and introduce them by name.

TEACHER SAY: Count the students with me.

 **STUDENTS DO:** Count the students with the teacher.

5. **TEACHER DO:** Position the students so that one student is standing in front of the other.

TEACHER SAY: Which student is in front?

STUDENTS DO: Call out the answer.

TEACHER SAY: Which student is behind?

STUDENTS DO: Call out the answer.

6. **TEACHER DO:** Switch the two students so that they are in the opposite order.

TEACHER SAY: Now, which student is in front?

STUDENTS DO: Call out the answer.

TEACHER SAY: Which student is behind?

STUDENTS DO: Call out the answer.



Share (5-10 mins)

Directions

1. **TEACHER DO:** Close the lesson by asking students to hold up their work to show the everyone. Then use **Calling Sticks** to ask 3 students to come to the board and draw 2 triangles, circles, or squares.



STUDENTS DO: Hold up their journals to show their work. Selected students draw 2 shapes on the board.

KINDERGARTEN II

Mathematics

CHAPTER 2

Lessons 11-20

Overview

Lessons 11-20

COMPONENT	DESCRIPTION	TIME
Calendar and Movement	During this daily routine, students develop number sense, calendar sense, early place value concepts, counting fluency, and problem-solving skills. Students explore quantity and practice counting through patterns and movement.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from colleagues' perspectives.	5-10 minutes

Learning Indicators

Throughout this chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY:

- Count objects to tell how many there are
- Count numbers up to 15, as a symbol, meaning, comparing, arranging
- Read and write numerals from 0 to 20
- Write numbers and represent quantities with a number, up to 20
- Make equivalent sets
- Understand the concepts of greater than, less than, and equal to

MEASUREMENT:

- Collect and classify data using objects and drawings (up to 20)

CH 2 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
11	**Students will:** • Participate in Calendar Math activities • Write the number 3 • Visually represent 3 using pictures • Use the term data
12	**Students will:** • Participate in Calendar Math activities • Write the number four • Visually represent 4 using pictures • Collect data • Compare quantities
13	**Students will:** • Participate in Calendar Math activities • Write the number and word 5 • Visually represent 5 using pictures • Collect data • Compare quantities
14	**Students will:** • Participate in Calendar Math activities • Practice counting and comparing quantities up to 3 • Create equivalent sets up to 3 • Compare quantities to find the greater number
15	**Students will:** • Participate in Calendar Math activities • Practice counting and comparing quantities up to 4 • Create equivalent sets up to 4 • Compare quantities to find the lesser and equal numbers
16	**Students will:** • Participate in Calendar Math activities • Count up to 5 • Create equivalent sets up to 5 • Compare quantities to find more and less
17	**Students will:** • Participate in Calendar Math activities • Review written numbers 1-5 • Visually represent quantities 1-5 using pictures, objects, and number line • Collect data • Compare quantities to find more, less, and equal.

LESSON	INSTRUCTIONAL FOCUS
18	**Students will:** • Participate in Calendar Math activities • Review written numbers 1-5 • Visually represent quantities 1-5 using pictures, objects, and number line • Collect data • Compare quantities to find more, less, and equal
19	**Students will:** • Participate in Calendar Math activities • Practice counting up to 6 • Visually represent quantities 1-6 using pictures, objects, and number line • Answer questions about survey data • Compare quantities to find more, less, and equal
20	**Students will:** • Participate in Calendar Math activities • Practice counting up to 7 • Visually represent quantities 1-7 using pictures and objects • Answer questions about survey data • Compare quantities to find more, less, and equal

Term/Theme Preparation for the Teacher

- You will need either space on a board, a large piece of paper, or a poster for creating a graph of the number of letters in students' names. If there are a lot of students in the class, you may need to use two pieces of paper. This should be posted where students can see it for the duration of this theme. You will refer to it periodically.
- Cut paper or sentence strips into equal sizes of 5 cm wide and 9-10 cm long. You will write students' names on these strips to display on the class graph.

Lesson 11 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Participate in Calendar Math activities • Write the number 3 • Visually represent 3 using pictures • Use the term data	• Calendar • Month • Day • Three • Data

MATERIALS

Calendar Math Area



Math journal and pencil





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to turn to their **Shoulder Partner** and say what month we are in.

TEACHER SAY: Who can now raise their hand and tell the class what month it is?

 **STUDENTS DO:** Raise hands to volunteer. Selected student answers the question.

2. TEACHER DO: Ask students to repeat the month.

 **STUDENTS DO:** Repeat the month.

3. TEACHER DO: Point to the days of the week one at a time, and say each day's name. Ask students to repeat the names.

 **STUDENTS DO:** Repeat the days of the week.

4. TEACHER DO: Ask students to turn and tell their **Shoulder Partner** how many days are in a week.

TEACHER SAY: Who can now raise their hand and tell the class how many days are in a week?

 **STUDENTS DO:** Raise hands to volunteer. Selected student answers the question.

5. TEACHER DO: Point to today's date (or number) on the calendar and say:

TEACHER SAY: Today is (day) the (date) of (month) (year).

 **STUDENTS DO:** Repeat the date.

6. TEACHER DO: Introduce a new Movement Math routine of collecting data on the number of letters in student names.

TEACHER SAY: Today we are going to try something new. We are going to gather data about the number of letters in our names. Data is a word that means facts or information. Do you remember when we collected data about our birthdays and our favorite days? The data we will collect today will be about how many letters are in our names.

7. TEACHER DO: Choose the name of one of your students who has fewer than 5 letters in his or her name. Write the name of the student on the board.

Note to the Teacher: You may write any name on the board (even if it is not a student's name) as long as has fewer than 5 letters. This name will need to stay up for the entire Chapter, so write it somewhere where you can either leave it on the board, or put it on a piece of paper that you can hang up in the classroom.

TEACHER SAY: Let's say the letters in this student's name. Say each letter as I point to it. If you are not sure about the letter, you can listen to me say it aloud.

TEACHER DO: Point to each letter in the name as students follow and name each letter.



STUDENTS DO: Say each letter of the chosen name in unison with the teacher or listen to the teacher say the letters aloud.

8. TEACHER SAY: Now let's count how many letters are in the name. Starting with the number one, count each letter as I point to it.

9. TEACHER DO: Write the number of letters in the name on the board beside the name.

TEACHER SAY: (Name of student) has ______ letters in their name.

10. TEACHER DO: Ask students to clap once for each letter in the chosen name.

TEACHER SAY: We are going to say each letter in the name and clap one time for every letter until we spell out the name.



STUDENTS DO: Clap one time as they say each letter in the chosen name along with the teacher.

11. TEACHER DO: Ask students to tap out the student's name, demonstrating what a gentle tap on the head looks like.

TEACHER SAY: This time, instead of clapping our hands, we are going to tap our heads as we say each letter.



STUDENTS DO: Tap their heads (softly) one time as they say each letter in the chosen name.

12. TEACHER DO: Ask students to high-five the student's name.

TEACHER SAY: Now, we are going to give our Shoulder Partners a high-five for each letter.



STUDENTS DO: High-five their **Shoulder Partner** as they say each letter in the chosen name.



Learn (25-30 mins)

Directions

1. TEACHER DO: On the board, draw the numeral 3, write the word "three", and draw 3 circles, 3 triangles, and 3 squares.

TEACHER SAY: Today we are going to practice writing and showing the number 3. I can represent 3 in many ways, in words and in drawings. All of the things I drew on the board show the number 3. Can you help me count to make sure I have 3?

2. TEACHER DO: Point to the word "three," then ask students to count each group of shapes with you.

 **STUDENTS DO:** Count the 3 circles, 3 triangles, and 3 squares in unison.

3. TEACHER DO: Hand out math journals and keep one for yourself. Have students turn to the next page.

TEACHER SAY: Let's practice different ways to show the number 3 in your math journal.

4. TEACHER DO: Point to the number word "three" on the board.

TEACHER SAY: Let's say each letter and clap it out.

 **STUDENTS DO:** Spell out the word while clapping each letter.

5. TEACHER SAY: Practice different ways to show the number 3 in your math journal. First, write the numeral 3 at the top of the page and then copy my drawings.

 **STUDENTS DO:** Write the number 3 at the top of the next blank page in the journal. Underneath, students draw 3 circles, 3 triangles, and 3 squares.

6. TEACHER SAY: When you have finished that, come up with your own ways to show the number 3. You could draw 3 fish, 3 trees, 3 shoes – anything you like, but draw something that shows you understand what how many 3 is.

 **STUDENTS DO:** Draw sets of three in the math journal.

7. TEACHER DO: When students finish, ask them show a **Shoulder Partner** their work.

 **STUDENTS DO:** Show their work to their **Shoulder Partner.**

8. TEACHER DO: Using the **Calling Sticks**, choose 3 students to join you in the front of the room, and introduce them by name. Ask the class to count the students in unison. Then position the students so that they form a line with one student in the middle.

TEACHER SAY: As I ask questions, tell your answers to your Shoulder Partner.
- **Which student is in the middle?**
- **How are these students the same?**
- **How are they different?**

(Answers may vary, but may include hair-style, gender, glasses, shoe type, etc.)

 **STUDENTS DO:** Share answers with their **Shoulder Partner**.

9. TEACHER DO: Next, switch the order of the students.

TEACHER SAY: Now, which student is in the middle? Share your answer with your Shoulder Partner.

 **STUDENTS DO:** Share answers with their **Shoulder Partner**.

10. TEACHER SAY: We switched the order of the students. Raise your hand if you still think there are 3 students. Let's count together.

TEACHER DO: Hover a hand over each student's head as you count out loud in unison with the students.

TEACHER SAY: Did the number of students change when we put them in a different order?

 **STUDENTS DO:** Share answers with their **Shoulder Partner**.

TEACHER DO: Using **Calling Sticks**, choose two students to answer who is in the middle and if the number of students changed for the whole class.



Share (5-10 mins)



Directions

1. TEACHER DO: Close the lesson by asking the students to hold up their work to show the classroom. Then use **Calling Sticks** to ask 3 students to come to the board and draw 3 of something.

 **STUDENTS DO:** Selected students draw 3 of something on the board.

Lesson 12 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Participate in Calendar Math activities • Write the number four • Visually represent 4 using pictures • Collect data • Compare quantities	• Four • Data • More • Less • Fewer • Bigger • Equal to

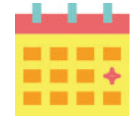
MATERIALS

Calendar Math Area



Math journal and pencil





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to turn to their **Shoulder Partner** and say what month we are in.

TEACHER SAY: Who can now raise their hand and tell the class what month it is?

 **STUDENTS DO:** Repeat the name of the month.

2. TEACHER DO: Review the days of the week in order.

TEACHER SAY: Now let's review the days of the week. You are getting so good at these! Today, when I point to a table, that table should say the next day of the week in order, then we will all repeat the day. I'll model by pointing to myself.

TEACHER DO: Point to yourself with one hand and Sunday with the other, saying "Sunday."

 **STUDENTS DO:** Repeat "Sunday."

3. TEACHER DO: Then point to a student table and Monday on the calendar. The table says "Monday," and all students repeat "Monday." Repeat this pattern, pointing to a new table for each day of the week.

TEACHER DO: Ask students to turn and tell their **Shoulder Partner** how many days are in a week.

 **STUDENTS DO:** Talk to their **Shoulder Partners**.

TEACHER SAY: Who can now raise their hand and tell the class how many days are in a week?

4. TEACHER DO: Point to today's date (or number) on the calendar and say:

TEACHER SAY: Today is (day) the (date) of (month) (year).

 **STUDENTS DO:** Repeat the date.

5. TEACHER DO: Practice new Movement Math routine of collecting data on the number of letters in student names.

TEACHER SAY: Remember that every day we do math by moving our bodies. Today we are going to continue gathering data about the number of letters in our names. Data is a word that means facts or information.

6. TEACHER DO: Either choose a name with less than 5 letters from the **Calling Sticks** or ask for a volunteer. Write the name of this new student on the board underneath the name and number from the day before.

TEACHER SAY: Let's say the letters in this student's name. Say each letter as I point to it.

TEACHER DO: Point to each letter in the name as students follow and name each letter.

 **STUDENTS DO:** Say each letter of the chosen name in unison with the teacher.

7. TEACHER SAY: Now let's count how many letters are in the name. Starting with the number one, count each letter as I point to it.

8. TEACHER DO: Write the number of letters in the name on the board beside the name.

TEACHER SAY: (Name of student) has ______ letters in their name. Let's compare the number of letters in (name of student) to the number of letters in (name of student from yesterday). We can use comparing words like more, less, and equal to, to compare their names.

- **With a show of hands, how many of you think that (today's name) has MORE letters than (yesterday's name)?**
- **With a show of hands, how many of you think that (today's name) has LESS letters than (yesterday's name)?**
- **With a show of hands, how many of you think that the number of letters in (today's name) is EQUAL TO the letters in (yesterday's name)?**

9. TEACHER DO: Using the names given, explain which name has more letters, which one has less, and explains (or uses) the term equal if appropriate. Example: Seth has 4 letters in his name and Lapis has 5 letters in her name. Lapis has more letters than Seth. Seth has fewer, or less letters than Lapis.

TEACHER SAY: The word more means that a number is bigger than another number. Show me (the smaller number of letters in the two names) on your fingers. To get to (the larger number of letters in the two names), you have to add MORE fingers.

The word less means that a number is smaller than another number. Show me (the larger number of letters in the two names) on your fingers. To get to (the smaller number of letters in the two names), you have to take away fingers. # is LESS THAN #.

10. TEACHER SAY: We are going to say each letter in the name and clap our knees one time for every letter until we spell out the name.

 **STUDENTS DO:** Clap knees once for each letter.

11. TEACHER SAY: We are going to do the same thing, but this time instead of clapping our hands we are going to tap our tables.

 **STUDENTS DO:** Tap the tables once for each letter.

12. TEACHER SAY: We are going to do the same thing one more time but this time we are going to give our Shoulder Partners a handshake for each letter.

 **STUDENTS DO:** Shake hands once for each letter.



Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: Let's remember what we talked about yesterday. Who can tell me what number we wrote?

 **STUDENTS DO:** Raise hands to share answers. Selected student answers the question.

TEACHER SAY: Right, we practiced the number 3. Can we clap our hands three times while counting each clap? 1, 2, 3. Let's tap our heads three times while counting each tap: 1, 2, 3. Now let's practice pretending our finger is a pencil and try writing the number 3 in the air. Can you write the number word in the air, too? Great! Now, who can guess what number we will study today?

2. TEACHER DO: On the board, draw the numeral 4, write the word "four", and draw 4 dots and 4 lines.

TEACHER SAY: Today we are going to practice writing and showing the number 4. I can represent 4 in many ways, in words and in drawings. All of the things I drew on the board show the number 4. Can you help me count to make sure I have 4?

TEACHER DO: Point to the word "four," then have students count the 4 drawings.

3. TEACHER DO: Hand out math journals and keep one for yourself. Have students turn to the next page.

TEACHER SAY: Let's practice different ways to show the number 4 in your math journal.

4. TEACHER DO: Point to the number word "four" on the board.

TEACHER SAY: Let's say each letter and clap it out.

 **STUDENTS DO:** Spell out the word while clapping each letter.

TEACHER SAY: Please write the numeral 4 at the top and then copy my drawings. When you have finished that, draw four of your favorite foods.

TEACHER DO: When students finish, have them show their **Shoulder Partner** their work.

 **STUDENTS DO:** Show their **Shoulder Partners** their work.

5. TEACHER DO: Using the **Calling Sticks**, choose 4 students to join you in the front of the room, and introduce them by name. Ask the class to count the students in unison. Then position the students into 2 groups of 2.

 **STUDENTS DO:** Selected students go to the front of the room.

TEACHER SAY: I have 2 groups. There are 2 students in each group. Since the numbers are the same, you can say I have an EQUAL number in each group.

6. TEACHER DO: Move the students into one group of 1 and one group of 3.

TEACHER SAY: Now, I have one group of 1 and one group of 3. Help me count to double check. The group with 3 students has MORE in it, because it is greater than or bigger than the group with 1 student. Turn and tell your Shoulder Partner what the words greater than or bigger mean.

 **STUDENTS DO:** Share answers with their **Shoulder Partner**.



Share (5-10mins)

Directions

1. **TEACHER DO:** Close the lesson by asking the students to hold up their work to show the classroom. Then use **Calling Sticks** to ask 3 students to come to the board and draw 4 of something.

 **STUDENTS DO:** Selected students draw 4 of something on the board.

Lesson 13 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Participate in Calendar Math activities • Write the number and word 5 • Visually represent 5 using pictures • Collect data • Compare quantities	• Five • Data • More • Less • Fewer • Bigger • Equal to

MATERIALS

Calendar Math Area



Math journal and pencil





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to turn to their **Shoulder Partner** and say what month we are in.

TEACHER SAY: Who can now raise their hand and tell the class what month it is?

 **STUDENTS DO:** Repeat the name of the month.

2. TEACHER DO: Review the days of the week in order.

TEACHER SAY: Now let's review the days of the week. You are getting so good at these! Today, when I point to a table, that table should say the next day of the week in order, then we will all repeat the day. I'll model by pointing to myself.

TEACHER DO: Point to yourself with one hand and Sunday with the other, saying "Sunday."

 **STUDENTS DO:** Repeat "Sunday."

3. TEACHER DO: Then point to a different student table than was first yesterday, and Monday on the calendar. The table says "Monday," and all students repeat "Monday." Repeat this pattern, pointing to a new table for each day of the week.

4. TEACHER DO: Ask students to turn and tell their **Shoulder Partner** how many days are in a week.

 **STUDENTS DO:** Talk to their **Shoulder Partners**.

TEACHER SAY: Who can now raise their hand and tell the class how many days are in a week?

 **STUDENTS DO:** Raise hands to answer. Selected student answers the question.

5. TEACHER DO: Point to today's date (or number) on the calendar and say:

TEACHER SAY: Today is (day) the (date) of (month) (year).

 **STUDENTS DO:** Repeat the date.

6. TEACHER DO: Practice new Movement Math routine of collecting data on the number of letters in student names.

TEACHER SAY: Remember that every day we do math by moving our bodies. Today we are going to continue gathering data about the number of letters in our names.

7. TEACHER DO: Either choose a name with less than 5 letters from the **Calling Sticks** or ask for a volunteer. Write the name of this new student on the board underneath the name and number from the day before.

TEACHER SAY: Let's say the letters in this student's name. Say each letter as I point to it.

TEACHER DO: Point to each letter in the name as students follow and name each letter.

 **STUDENTS DO:** Say each letter of the chosen name in unison with the teacher.

8. TEACHER SAY: Now let's count how many letters are in the name. Starting with the number one, count each letter as I point to it. [When finished] How many letters does today's name have?

 **STUDENTS DO:** Call out the answer together.

TEACHER DO: Write the number of letters in the name on the board beside the name.

TEACHER SAY: (Name of student) has ______ letters in their name. Let's compare the number of letters in (name of student) name to the number of letters in our first two names. We can use comparing words like more, less, and equal to, to compare names. Think about the words LESS than you learned yesterday.

- **With a show of hands, how many of you think that the number of letters in (today's name) is LESS THAN the number of letters in (yesterday's name)?**
- **With a show of hands, how many of you think that the number of letters in (today's name) is LESS THAN the number of letters in (first day's name)?**

9. TEACHER DO: Using the names given, explain which name has more letters, which one has less, and explains (or uses) the term equal if appropriate.

TEACHER SAY: We are going to say each letter in the name and clap one time over our heads for every letter until we spell out the name.

 **STUDENTS DO:** Clap over their heads once for each letter.

10. TEACHER SAY: We are going to do the same thing, but this time instead of clapping our hands we are going to tap our toes.

 **STUDENTS DO:** Tap their toes once for each letter.

11. TEACHER SAY: We are going to do the same thing one more time but this time we are going to give our Shoulder Partners a high-five with both hands for each letter.

 **STUDENTS DO:** Give partners a high five for each letter.

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: Let's remember what we talked about yesterday. Who can tell me what number we wrote?



Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: Let's remember what we talked about yesterday. Who can tell me what number we wrote?

2. TEACHER DO: Call on a raised hand.

TEACHER SAY: Right, we practiced the number 4. Can we clap our hands 4 times while counting each clap?

- **Let's tap our toes three times while counting each tap.**
- **Now let's practice pretending our finger is a pencil and try writing the number 4 in the air.**
- **Can you do the same thing but this time write the word "four"?**
- **Great! Now, who can guess what number we will study today?**

3. TEACHER DO: On the board, draw the numeral 5, write the word "five", and draw two sets of shapes that have 5.

TEACHER SAY: Today we are going to practice writing and showing the number 5. I can represent 5 in many ways, in words, drawings, movements, and objects. All of the things I drew on the board show the number 5. Can you help me count to make sure I have 5?

4. TEACHER DO: Point to the word "five," then have students count the 2 sets in unison.

5. TEACHER DO: Hand out math journals and keep one for yourself. Have students turn to the next page.

TEACHER SAY: Let's practice different ways to show the number 5 in your math journal.

7. TEACHER DO: Point to the number word "five" on the board.

TEACHER SAY: Let's say each letter and clap it out.

 **STUDENTS DO:** Spell out the word while clapping each letter.

TEACHER SAY: Please write the numeral 5 then copy my drawings. When you have finished that, come up with your own ways to show the number 5.

 **STUDENTS DO:** When students finish, show a **Shoulder Partner** their work.

8. TEACHER DO: Using the **Calling Sticks**, choose 5 students to join you in the front of the room, and introduce them by name.

 **STUDENTS DO:** Count the students at the front in unison.

TEACHER DO: Next, position the students into 2 groups: one of 2 and one of 3.

TEACHER SAY: I have 2 groups. Let's count them.

 **STUDENTS DO:** Count each group in unison.

TEACHER SAY: There are 3 students in one group and 2 in the other group. The group with 2 students has less students than the group of 3. That means that the number is smaller.

- **If I put them into one group of 1 and one group of 4, which group will have less students, be smaller, than the other group?**
- **We have put the students into groups. Does that change the total number of students? How many students are in the front of the room now?**

 **9. STUDENTS DO:** Share answers with a **Shoulder Partner**.



Share (5-10 mins)

Directions

1. Close the lesson by asking the students to hold up their work to show the classroom. Then use **Calling Sticks** to ask 3 students to come to the board and draw 5 of something.

 **STUDENTS DO:** Selected students draw 5 of something on the board..

Lesson 14 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Practice counting and comparing quantities up to 3 • Create equivalent sets up to 3 • Compare quantities to find the greater number	• One, two, three, four, five • Data • Fewer • Less • Bigger • Equal to	Gather sets of 6 objects to use as counters (one set per student). Examples: beans, dry pasta, small stones, buttons, math counters, connecting cubes

MATERIALS

Calendar Math Area



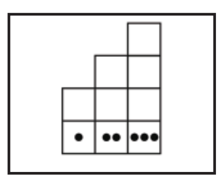
Math journal and pencil



Sets of 6 counters (one set per student and one for the teacher)



Vertical counting frames to 3





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to say the name of the month in unison.

 **STUDENT DO:** Say the name of the month together.

2. TEACHER DO: Review the days of the week in order.

TEACHER SAY: Now let's review the days of the week. Remember, when I point to a table, that table should say the next day of the week in order, then we will all repeat the day.

TEACHER DO: Point to a table that has not yet been first. The table says "Sunday."

 **STUDENTS DO:** Repeat "Sunday."

3. TEACHER DO: Then point to another table and Monday on the calendar. The table says "Monday," and all students repeat "Monday." Repeat this pattern, pointing to a new table for each day of the week.

4. TEACHER DO: Ask students to turn and tell their **Shoulder Partner** how many days are in a week.

TEACHER SAY: Who can now raise their hand and tell the class how many days are in a week?

5. TEACHER DO: Point to today's date (or number) on the calendar and say:

TEACHER SAY: Today is (day) the (date) of (month) (year).



STUDENTS DO: Repeat the date.

6. TEACHER DO: Continue the new Movement Math routine of collecting data on the number of letters in student names.

TEACHER SAY: Let's continue gathering data about the number of letters in students' names.

7. TEACHER DO: Choose a name with six or fewer letters from the **Calling Sticks** or ask for a volunteer. Write the name of this new student on the board underneath the name and number from the day before.

TEACHER SAY: Let's say the letters in this student's name. Say each letter as I point to it.

TEACHER DO: Point to each letter in the name as students follow and name each letter.



STUDENTS DO: Say each letter of the chosen name in unison with the teacher.

8. TEACHER SAY: Now let's count how many letters are in the name. Starting with the number one, count each letter as I point to it. How many letters does today's name have?

Note to teacher: If name has six letters, pause at five to ask the class if anyone knows what comes after five. If no one answers correctly, tell them that six is the next number, and they will learn more about six later in the year. For now, they only need to know that six is one more than five.

9. TEACHER DO: Write the number of letters in the name on the board beside the name.

TEACHER SAY: (Name of student) has ______ letters in their name. Let's compare the number of letters in (name of student) name to the number of letters in our first three names. Think about the words "MORE than" we have been learning.

- **Stand up at your table if you think that the number of letters in (today's name) is MORE THAN the number of letters in (yesterday's name)? Now everyone take a seat.**
- **Stand up at your table if you think that the number of letters in (today's name) is MORE THAN the number of letters in (the second name)? Now everyone take a seat.**
- **Stand up at your table if you think that the number of letters in (today's name) is MORE THAN the number of letters in (the first name)? Now everyone take a seat.**

10. TEACHER DO: Using the names given, explain which name has more letters, which one has less, and explains (or uses) the term equal if appropriate. Ask students to clap out the new student's name in a circle:

TEACHER SAY: We are going to say each letter in the name and clap one time for every letter until we spell out the name. Each time you clap, move your hands a little further around a circle in front of you.

11. TEACHER DO: Ask students to tap out the student's name with two fingers on the back of their other hand. Model for students.

TEACHER SAY: We are going to do the same thing, but this time instead of clapping our hands we are going to tap two fingers on the back of the other hand.

12. TEACHER DO: Ask students to high-five the student's name using alternating hands. Ask a student to join you at the front of the room to demonstrate.

TEACHER SAY: We are going to do the same thing one more time but this time we are going to give our Shoulder Partners a high-five for each letter. Start with your right hands on the first letter, then use your left for the second letter, then go back and forth until you are done saying letters.



Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: Let's remember what we talked about yesterday. Who can tell me what number we wrote?

2. TEACHER DO: Call on a raised hand.

TEACHER SAY: Right, we practiced the number 5. Can we clap our hands 5 times while counting each clap?

- **Let's tap our heads 5 times while counting each tap**
- **Now let's practice pretending our finger is a pencil and try writing the number 5 in the air.**
- **Can you do the same thing but this time write the word "five"?**
- **Great! Today we are going to learn something new. We are going to work on writing numbers vertically. Vertical means up and down.**

3. TEACHER DO: Draw the vertical counting sheet on the board. Hand out copies to students if available or ask students to copy the drawing into the math journal. Hand out Math journals and counting beans.

TEACHER SAY: Today we are going to practice counting and showing the numbers 1-3. Help me count the dots at the bottom of these rows. Rows are boxes that go across.

4. TEACHER DO: Starting with 1, count each dot aloud with students in unison, moving across the row. Repeat this three times.

TEACHER SAY: The dots on the bottom show me how many beans to put in the boxes above. If I have one dot, I will put one bean in the column above. Columns are boxes that go up. The next box has two dots, how many beans do you think I will put above? The last box has three dots, how many beans will I put in the boxes?

5. TEACHER DO: Ask students to practice putting the beans in their boxes.



STUDENTS DO: Try placing the correct number of beans two times and then ask their **Shoulder Partner** to check their work.

TEACHER SAY: Now let's compare our numbers. Do I have more beans in the two column or the one column? Please raise your hand and tell me how you know.

6 . TEACHER DO: Call on a raised hand.

TEACHER SAY: The number two is greater than the number one because there are more beans in the 2 column than the one column.



Share (5-10 minutes)

Directions

1. TEACHER DO: Close the lesson by reviewing "more than" with students.

TEACHER SAY: Hold up 3 fingers in the air on one hand and 2 fingers in the air on the other hand. Now, look at your hands and decide which one is holding up more fingers. Keep the hand MORE fingers up in the air.

Lesson 15 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Practice counting and comparing quantities up to 4
- Create equivalent sets up to 4
- Compare quantities to find the lesser and equal numbers

KEY VOCABULARY

- One, two, three, four
- Data
- Fewer
- Less
- Bigger
- Equal to

LESSON PREPARATION FOR THE TEACHER

Gather sets of 10 objects to use as counters (one set per student). Examples: beans, dry pasta, small stones, buttons, math counters, connecting cubes

MATERIALS

Calendar Math Area



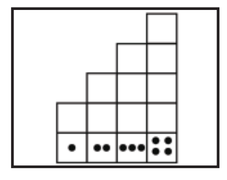
Math journal and pencil



Counting beans 10 per student and one set of 10 for teacher



Vertical counting frames to 4





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to say the name of the month in unison. Review the days of the week in order.

TEACHER SAY: Now let's review the days of the week. Today, when I point to a table, that table should stand up and say the next two days of the week in order, then we will all repeat those two days.

TEACHER DO: Point to a table that has not yet been first. The students at the table stand and say "Sunday, Monday."

 **STUDENTS DO:** Repeat "Sunday, Monday."

2. TEACHER DO: Then point to another table. The second table says "Tuesday, Wednesday," and all students repeat "Tuesday, Wednesday." Repeat this pattern, pointing to a new table and starting over on the days of the week until every table has participated.

 **STUDENTS DO:** Say the days of the week when selected.

3. TEACHER DO: Ask students to turn and tell their **Shoulder Partner** how many days are in a week.

TEACHER SAY: Who can now raise their hand and tell the class how many days are in a week?

4. TEACHER DO: Point to today's date (or number) on the calendar and say:

TEACHER SAY: Today is (day) the (date) of (month) (year).



STUDENTS DO: Repeat the date.

5. TEACHER DO: Continue the new Movement Math routine of collecting data on the number of letters in student names.

TEACHER SAY: Let's continue gathering data about the number of letters in students' names.

6. TEACHER DO: Choose a name with six or fewer letters from the **Calling Sticks** or ask for a volunteer. Write the name of this new student on the board underneath the name and number from the day before.

TEACHER SAY: Let's say the letters in this student's name. Say each letter as I point to it.

TEACHER DO: Point to each letter in the name as students follow and name each letter.



STUDENTS DO: Say each letter of the chosen name in unison with the teacher.

7. TEACHER SAY: Now let's count how many letters are in the name. Starting with the number one, count each letter as I point to it. How many letters does today's name have?

Note to teacher: If name has six letters, pause at five to ask the class if anyone knows what comes after five. If no one answers correctly, tell them that six is the next number, and they will learn more about six later in the year. For now, they only need to know that six is one more than five.

8. TEACHER DO: Write the number of letters in the name on the board beside the name.

TEACHER SAY: (Name of student) has ______ letters in their name. Let's compare the number of letters in (name of student) name to the number of letters in our first three names. Think about the words "LESS than" we have been learning.

- **Stand up at your table if you think that the number of letters in (today's name) is LESS THAN the number of letters in (yesterday's name)? Now everyone take a seat.**
- **Stand up at your table if you think that the number of letters in (today's name) is LESS THAN the number of letters in (the third name)? Now everyone take a seat.**
- **Stand up at your table if you think that the number of letters in (today's name) is LESS THAN the number of letters in (the second name)? Now everyone take a seat.**
- **Stand up at your table if you think that the number of letters in (today's name) is LESS THAN the number of letters in (the first name)? Now everyone take a seat.**

9. TEACHER SAY: Now think about the words "equal to" we have been learning. Is the number of letters in this name EQUAL to any other names? [Call on a few students to answer].

10. TEACHER DO: Using the names given, explain a few relationships between the names on the list including an example of more than, less than, and equal to. Ask students to clap out the new student's name on their knees:

TEACHER SAY: We are going to say each letter in the name and clap one time on our knees for every letter until we spell out the name.

12. TEACHER DO: Ask students to gently slap the table with each letter.

TEACHER SAY: This time instead of clapping our hands we are going to tap the table with our hands.

13. TEACHER DO: Ask students to tap out the student's name on their neighbor's shoulder.

TEACHER SAY: Now, this time we are going to give our Shoulder Partners a tap on the shoulder for each letter.



Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: Let's remember what we talked about yesterday. Who can tell me what numbers we made with beans?

2. TEACHER DO: Call on 2-3 raised hands.

TEACHER SAY: We practiced counting vertically to make the numbers 1-3. We compared numbers and built them with beans. If we worked on making the number 3 yesterday, can you guess what number we will make today? What is one more than three? When I say one more I am adding another number to the number I already had. So if I hold up 3 fingers (teacher holds up fingers) and add one more (teacher holds up 4th finger) how many will I have now?

 **3. STUDENTS DO:** Respond with the number 4.

3. TEACHER DO: Draw the vertical counting sheet on the board. All students need a copy of the counting sheet or it can be drawn into their math journal. Hand out Math journals and counters.

TEACHER SAY: Today we are going to practice counting and showing the numbers 1-4. Help me count the dots at the bottom of these rows. Remember, rows are boxes that go across.

4. TEACHER DO: Starting with one, count each dot aloud with students in unison, moving across the row. Repeat this three times.

TEACHER SAY: The dots on the bottom show me how many beans to put in the boxes above. If I have one dot, I will put one bean in the column above. Columns are boxes that go up. The next box has two dots, how many beans do you think I will put above? How many beans will I put in the rest of the columns?

5. TEACHER DO: Ask students to practice putting the beans in their boxes.

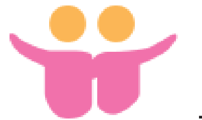
 **STUDENTS DO:** Try placing the correct number of beans two times and then ask their **Shoulder Partner** to check their work.

6. TEACHER SAY: Now let's compare our numbers. Do I have more beans in the three column or the four column? Please raise your hand and tell me how you know.

7. TEACHER DO: Call on a raised hand.

TEACHER SAY: The number three is less than the number four because there are less beans in the three column than the four column.

TEACHER DO: Repeat asking 2-3 similar comparative questions using more than and less than.



Share (5-10 minutes)

Directions

1. TEACHER DO: Close the lesson by reviewing "less than" with students.

TEACHER SAY: Hold up 3 fingers in the air on one hand and 4 fingers in the air on the other hand. Now, look at your hands and decide which one is holding up less (fewer) fingers. Keep the hand with less (fewer) fingers up in the air.

 **STUDENTS DO: Hold up the lesser number of fingers.**

Lesson 16 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count up to 5 • Create equivalent sets up to 5 • Compare quantities to find more and less	• One, two, three, four, five • Data • More • Less	Gather sets of 5 objects to use as counters (one set per student). Examples: beans, dry pasta, small stones, buttons, math counters, connecting cubes

MATERIALS

Calendar Math Area



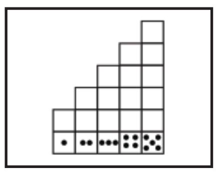
Math journal and pencil

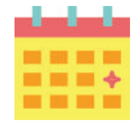


Sets of 5 counting objects (one set per student and one set for the teacher)



Vertical counting frames to 5





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to whisper the name of the month into their hands. Then call on one student to say the name of the month out loud. Review the days of the week in order.

TEACHER SAY: **Now let's review the days of the week. Today, when I point to a table, that table should stand up and say the three days of the week in order, then we will all repeat those three days.**

TEACHER DO: Point to a table. The students at the table stand and say "Sunday, Monday, Tuesday."

 **STUDENTS DO:** Repeat "Sunday, Monday, Tuesday."

2. TEACHER DO: Then point to another table. The second table says "Wednesday, Thursday, Friday" and all students repeat "Wednesday, Thursday, Friday." Repeat this pattern, pointing to a new table and starting over on the days of the week until every table has participated.

3. TEACHER DO: Ask students to turn and tell their **Shoulder Partner** how many days are in a week.

TEACHER SAY: **Who can now raise their hand and tell the class how many days are in a week?**

4. TEACHER DO: Point to today's date (or number) on the calendar and say:

TEACHER SAY: **Today is (day) the (date) of (month) (year).**



STUDENTS DO: Repeat the date.

5. TEACHER DO: Continue the new Movement Math routine of collecting data on the number of letters in student names.

TEACHER SAY: **Let's continue gathering data about the number of letters in students' names.**

6. TEACHER DO: Chooses a name from the **Calling Sticks** or ask for a volunteer. Write the name of this new student on the board underneath the name and number from the day before.

TEACHER SAY: **Let's say the letters in this student's name. Say each letter as I point to it.**

 **STUDENTS DO:** Say each letter of the chosen name as the teacher points to it.

7. TEACHER DO: Points to letters in name and students say each one.

TEACHER SAY: **Now let's count how many letters are in the name. Starting with the number one, count each letter as I point to it.**

 **STUDENTS DO:** Count each letter as the teacher points to it.

8. TEACHER DO: Write the number of letters in the name on the board beside the name.

TEACHER SAY: **(Name of student) has ______ letters in their name. Let's compare the number of letters in (name of student) name to the number of letter in (name of student from yesterday's name) We can use comparing words like more, less, and equal to, to compare their names.**

9. TEACHER DO: Using the most recent two names given, call on a student to answer which name has MORE letters than the other. Ask one more student if they agree or disagree, and why.

 **STUDENTS DO:** Raise hand to volunteer.

TEACHER DO: Call on a raised hand.

TEACHER SAY: **We are going to say each letter in the name and clap one time for every letter until we spell out the name.**

 **STUDENTS DO:** Clap for every letter in the name.

10. TEACHER DO: Ask students to tap out the student's name.

TEACHER SAY: **This time we are going to tap our heads with each letter.**

 **STUDENTS DO:** Tap their heads for each letter in the name.

TEACHER SAY: This time, give your **Shoulder Partner** a high-five as you say each letter.

 **STUDENTS DO:** Students high-five their partners as they say each letter.



Learn (25-30 mins)

Directions

1. TEACHER DO: Teacher reviews yesterday's lesson.

TEACHER SAY: **Let's remember what we talked about yesterday. Who can tell me what numbers we made with beans?**

TEACHER DO: Call on a raised hand.

2. TEACHER SAY: **Right, we practiced counting vertically to make the numbers 1-4. We compared numbers and built them with beans. If we worked on making the number 4 yesterday, can**

you guess what number we will make today? What is one more than four? When I say one more I am adding another number to the number I already had. So if I hold up 4 fingers (teacher holds up fingers) and add one more (teacher holds up 5th finger) how many will I have now?



STUDENTS DO: Respond together: 5

3. TEACHER DO: Draw the vertical counting sheet on the board. All students need a copy of the hand out or it can be drawn into their math journal. Hand out Math journals and counters.

TEACHER SAY: Today we are going to practice counting and showing the numbers 1-5. Help me count the dots at the bottom of these rows. Rows are boxes that go across.



STUDENTS DO: Move across counting each dot along with the teacher. Repeat this three times.

4. TEACHER SAY: The dots on the bottom show me how many beans to put up top. If I have one dot, I will put one bean in the column above. Columns are boxes that go up. The next box has two dots, how many beans do you think I will put above? The last box has five dots, how many beans will I put in the boxes?

TEACHER DO: Call on a raised hand.



STUDENTS DO: Selected student answers the question.

5. TEACHER DO: Teacher asks students to take out their beans and practice putting the beans in their boxes.



STUDENTS DO: Practice putting the beans in their boxes. They should try it two times themselves and then ask their **Shoulder Partner** to check their work.

6. TEACHER SAY: Let's count the columns together.



STUDENTS DO: Count vertically along with the teacher.

7. TEACHER SAY: Now let's compare our numbers. Do I have more beans in the three column or the five column? Please raise your hand and tell me how you know.

TEACHER DO: Call on a raised hand.

8. TEACHER SAY: The number three is less than the number five because there are less beans in the three column than the five column.



Share (5-10mins)

Directions

1. TEACHER DO: Close the lesson by asking students to compare 5 fingers and 3 fingers.

TEACHER SAY: Hold up 5 fingers in the air on one hand and 3 fingers in the air on the other hand. Look at your hands and decide which hand is holding up more fingers. Keep the hand with the greater number of fingers up in the air.



STUDENTS DO: Hold up 5 fingers on one hand and 3 on the other. Students should keep the hand holding up 5 fingers in the air.

Lesson 17 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Review written numbers 1-5 • Visually represent quantities 1-5 using pictures, objects, and number line • Collect data • Compare quantities to find more, less, and equal	• One, two, three, four, five • Data • Number line • More • Less • Equal	Gather sets of 5 objects to use as counters (one set per student). Examples: beans, dry pasta, small stones, buttons, math counters, connecting cubes

MATERIALS

Calendar Math Area

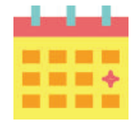


Math journal and pencil



Sets of 5 counters (one set per student and one set for the teacher)





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to whisper the name of the month into their hands. Then call on one student to say the name of the month out loud. Review the days of the week in order.

2. TEACHER SAY: Now let's review the days of the week. Let's see if we can say all seven days in a row, in unison.

TEACHER DO: Point to the days of the week one at a time, and say each day's name in unison with the students (instead of the students repeating each day one at a time).



STUDENTS DO: Say along with the teacher: Sunday… Monday… Tuesday… [continue to Saturday]

3. TEACHER DO: Ask students to turn and tell their **Shoulder Partner** how many days are in a week.



STUDENTS DO: Tell their shoulder partners how many days are in a week.

TEACHER SAY: Who can now raise their hand and tell the class how many days are in a week?



STUDENTS DO: Selected students answer the question.

TEACHER DO: Call on a raised hand. Point to today's date (or number) on the calendar.

TEACHER SAY: Today is (day) the (date) of (month) (year).



STUDENTS DO: Repeat the date.

4. TEACHER DO: Prepare for movement math. Teacher either chooses a name from the **Calling Sticks** or asks for a volunteer. Write the name of this new student on the board underneath the name and number from the day before.

TEACHER SAY: **Let's say the letters in this student's name. Say each letter as I point to it.**



STUDENTS DO: Say each letter as the teacher points to it.

5. TEACHER SAY: **Now let's count how many letters are in the name. Starting with the number one, count each letter as I point to it.**



STUDENTS DO: Count each letter as the teacher points to it.

6. TEACHER DO: Write the number of letters in the name on the board beside the name.

TEACHER SAY: **(Name of student) has ______ letters in their name. Let's compare the number of letters in (name of student) name to the number of letter in (name of student from yesterday's name)**
We can use comparing words like more, less, and equal to, to compare their names.

- **With a show of hands, how many of you think that (today's name) has MORE letters than (yesterday's name)?**
- **With a show of hands, how many of you think that (today's name) has LESS letters than (yesterday's name)?**
- **With a show of hands, how many of you think that the number of letters in (today's name) is EQUAL TO the letters in (yesterday's name)?**



STUDENTS DO: Raise hands in response to the teacher's questions.

7. TEACHER DO: Using the names given, explain which name has more letters, which one has less, and explains (or uses) the term equal if appropriate. Ask students to count out the new student's name by pounding a fist (gently) on the table.

TEACHER SAY: **We are going to say each letter in the name and gently pound our fist on the table for every letter until we spell out the name.**



STUDENTS DO: Students gently pound their fists on the table for each letter in the name.

8. TEACHER DO: Ask students to repeat the letters with a new movement.

TEACHER SAY: **This time, pump your fist in the air as you say the letters.**



STUDENTS DO: Students pump their fists in the air for each letter in the name.

9. TEACHER DO: Ask students to "low-five" the student's name with a **Shoulder Partner**.

TEACHER SAY: **We are going to do the same thing one more time but this time we are going to give our Shoulder Partners a low-five – a high five, but down by your feet – for each letter.**



STUDENTS DO: Give "low-five" to shoulder partners for each letter in the name.



Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: **Let's remember what we talked about yesterday. Who can list all the numbers we made with beans?**

TEACHER DO: Call on a raised hand.

2. TEACHER SAY: Right, we practiced counting vertically to make the numbers 1-5. We compared numbers and built them with beans. We worked on making the number 5 yesterday. Today we are going to take all that we know about counting the numbers 1-5 and put them on a number line. A number line shows us the order of numbers and can be a helpful tool in math.

3. TEACHER DO: Write the numbers 0,1,2,3,4,5 on the board to make a number line.

TEACHER SAY: I drew a number line on the board. Today our number line starts at zero and goes up to five. Count with me as I touch each number: 0, 1, 2, 3, 4, 5.

 **STUDENTS DO:** Count aloud with the teacher.

4. TEACHER DO: Hand out math journals and keep one for yourself. Have students turn to the next page.

TEACHER SAY: We will draw a number line together like the one on the board together.

5. TEACHER DO: Draw a line on the board.

TEACHER SAY: Draw a number line like this one in your math journal. I will come around and help you if you need help.

 **STUDENTS DO:** Copy the teacher's number line in their math journals.

6. TEACHER DO: Make 6 dots on the line while asking students to do the same in math journals.

 **STUDENTS DO:** Make 6 dots on the number line in their math journals.

7. TEACHER SAY: Each one of these dots represents a number on the number line. Starting at zero, let's write each number on the line: 0, 1, 2, 3, 4, 5.

 **STUDENTS DO:** Write the numbers 0-5 on their number lines.

8. TEACHER DO: Take 5 beans and model how to count out each number.

TEACHER SAY: Now that you all have a complete number line, you can practice counting out your beans. Watch as I practice counting using my beans and the number line. First I will put all of the beans in a pile in front of me. For the number zero I won't count any beans because zero means there are no beans. For the number one, I will count out 1 bean from my pile and put it above the number 1. I will then count out 2 beans. I will put them on top of the two on my number line. Please take out your beans and try the first two numbers with me.

 **STUDENTS DO:** Practice counting and representing the numbers 1 and 2.

9. TEACHER DO: Repeat the previous step with numbers 3-5. Wait after each number to let students catch up.

 **STUDENTS DO:** Practice counting and representing the numbers 3, 4, and 5.

10. TEACHER SAY: You did a wonderful job today! We will practice this again tomorrow and you will get a chance to show me how much you have learned!



Share (5-10mins)

Directions

1. TEACHER DO: Close the lesson by asking the students to hold up a number of fingers in the air: 2, 4, 5, 3, 1, 0, 3.

 **STUDENTS DO:** Hold up fingers in response to the teacher.

Lesson 18 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Participate in Calendar Math activities • Review numbers 1-5 • Visually represent quantities 1-5 using pictures, objects, and number line • Collect data • Compare quantities to find more, less, and equal	• One, two, three, four, five • Data • Number line

LESSON MATERIALS: Same as previous day



Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to whisper the name of the month into their hands. Then call on one student to say the name of the month out loud. Review the days of the week in order.

TEACHER SAY: Now let's review the days of the week. Today, when I point to you, say the next day of the week. If you don't know it, don't worry – just say "help" and the rest of the class will help you remember.

TEACHER DO: Point to yourself and say "Sunday," then point to the first student in the front. That student says "Monday," and point to the next student to say "Tuesday," and so on until you have pointed at every student in the class. If a student forgets the next day, ask the class to say the next day in unison and move on to the next student.



STUDENTS DO: Say the day of the week when selected.

2. TEACHER DO: Ask students to turn and tell their **Shoulder Partner** how many days are in a week.



STUDENTS DO: Students turn to their shoulder partners and say how many days are in a week.

TEACHER SAY: Who can now raise their hand and tell the class how many days are in a week?

3. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: Today is (day) (number date) of (month). Repeat the date.



STUDENTS DO: Repeat the date.

4. TEACHER DO: Prepare for movement math. Either choose a name from the **Calling Sticks** or ask for a volunteer. Write the name of this new student on the board underneath the name and number from the day before.

TEACHER SAY: Let's say the letters in this student's name. Say each letter as I point to it.

5. TEACHER DO: Teacher points to letters in name.

 STUDENTS DO: Say each letter in the name as the teacher points.

6. TEACHER SAY: **Now let's count how many letters are in the name. Starting with the number one, count each letter as I point to it.**

 STUDENTS DO: Count the letters in the name as the teacher points.

7. TEACHER DO: Write the number of letters in the name on the board beside the name.

TEACHER SAY: **(Name of student) has ______ letters in their name. Let's compare the number of letters in (name of student) name to the number of letter in (name of student from yesterday's name) We can use comparing words like more, less, and equal to, to compare their names.**

8. TEACHER DO: Using the names given, explain which name has more letters, which one has less, and explains (or uses) the term equal if appropriate. Example: Seth has 4 letters in his name and Lapis has 5 letters in her name. Lapis has more letters than Seth. Seth has fewer, or less letters than Lapis.

9. TEACHER SAY: **We are going to say each letter in the name and clap one time for every letter until we spell out the name.**

 STUDENTS DO: Clap one time for each letter as they spell the name.

10. TEACHER SAY: **We are going to do the same thing, but this time instead of clapping our hands we are going to tap our heads.**

 STUDENTS DO: Tap their heads one time for each letter as they spell the name.

11. TEACHER SAY: **We are going to do the same thing one more time but this time we are going to give our Shoulder Partners a high-five for each letter.**

 STUDENTS DO: Give their shoulder partners a high-five for each letter as they spell the name.



Learn (25-30 mins)

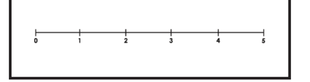
Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: **Let's remember what we talked about yesterday. Who can tell me what a number line is?**

TEACHER DO: Call on a raised hand.

TEACHER SAY: **Right, a number line shows us ordered numbers.**



2. TEACHER DO: Write the numbers 0, 1, 2, 3, 4, 5 on the board to make a number line. Ask students to practice saying the numbers on a number line three times in order.

TEACHER SAY: **Today we are going to practice counting on a number line again. Let's practice saying each number as I point to it: 0, 1, 2, 3, 4, 5. (Repeat three times.)**

 STUDENTS DO: Practice counting the numbers on the number line three times.

4. TEACHER DO: Ask students to practice saying the numbers starting at 5 and moving backwards. Repeat three times.

TEACHER SAY: **This time let's start at 5 and count backwards: 5, 4, 3, 2, 1, 0. (Repeat three times.)**

 STUDENTS DO: Practice counting down the number line three times.

5. TEACHER DO: Hand out math journals and keep one for yourself.

TEACHER SAY: Turn to the page where you drew a number line yesterday.

STUDENTS DO: Students turn to the page where they drew the number line during yesterday's math lesson.

6. TEACHER DO: Ask students to do the following:

TEACHER SAY: This time let's use the number line you drew and practice going from 0-5. Can you whisper the numbers to yourself 3 times pointing to each number as you say its name?



STUDENTS DO: Practice counting on the number line independently while whispering to themselves and pointing to each number.

7. TEACHER SAY: Can you count backwards whispering the numbers to yourself 3 times?



STUDENTS DO: Practice counting down on the number line independently while whispering to themselves and pointing to each number.

8. TEACHER SAY: This time I am going to ask you to point to a number on the number line. Please point to the number and then turn to your Shoulder Partner and make sure you agree. Point to the number 2 on your number line.

TEACHER DO: Repeat for the numbers 4, 1, 0, 5, 3.



STUDENTS DO: Students point to the number announced by the teacher and compare their thinking with that of their **Shoulder Partner**.

9. TEACHER DO: Take 5 beans and model how to count out each number.

TEACHER SAY: Watch as I practice counting using my beans and the number line. First I will put all of the beans in a pile in front of me. For the number zero I won't count any beans because zero means there are no beans. For the number one, I will count out 1 bean from my pile and put it above the number 1. Then I will make 1 dot underneath the number one. I will then return the bean to my pile. Next, I will count our 2 beans. I will put them on top of my number line and make two dots underneath the number 2. Please take out your beans and try the first two numbers with me.



STUDENTS DO: Practice counting and representing the numbers 1 and 2.

10. TEACHER DO: Repeat the previous step with numbers 3-5. Wait after each number to let students catch up.



STUDENTS DO: Practice counting and representing the numbers 3, 4, and 5.

11. TEACHER SAY: Look at your number line and beans. What do you notice about the beans as you go from 0 to 5? Turn to your Shoulder Partner and tell them what you are thinking.

12. TEACHER DO: Call on volunteers to answer the question. Students should notice that the number of beans in each pile on the number line goes up as the numbers go up.



STUDENTS DO: Students explain their thinking about the beans and the number line, first to their **Shoulder Partner** and then to the whole class.



Share (5-10mins)

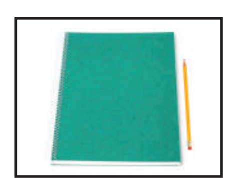
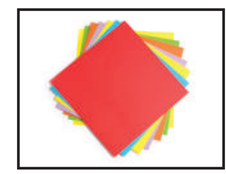
Directions

1. Close the lesson by asking the students to hold up 3 fingers in the air, 2, 4, 5, 3, 1, 0, 3.

Lesson 19 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Participate in Calendar Math activities • Practice counting up to 6 • Visually represent quantities 1-6 using pictures, objects, and number line • Answer questions about survey data • Compare quantities to find more, less, and equal	• One, two, three, four, five, six • Data • Number line • More • Less • Equal

MATERIALS

Calendar Math Area		Math journal and pencil (see Term Preparation for instructions)	
Counting beans 6 per student and one set of 6 for teacher		Blank pieces of paper, cut into strips about 5 cm wide and 9-10 cm long (You will write students' names on these strips to create a graph.)	
Chart paper or large sheets of paper for making a graph (or a place on the board)		Tape, glue, or glue stick	



Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to say the name of the month in unison.

2. TEACHER DO: Review the days of the week in order.

TEACHER SAY: Now let's review the days of the week. At your tables, everyone whisper the names of all seven days together. I'll demonstrate.

TEACHER DO: Whisper the names of all seven days as a reminder for students.

 **STUDENTS DO:** Whisper the names of all seven days with their colleagues.

3. TEACHER SAY: Turn and tell your Shoulder Partner how many days are in a week.

 **STUDENTS DO:** Students turn to their shoulder partners and tell each other how many days are in a week.

4. TEACHER SAY: Who can now raise their hand and tell the class how many days are in a week?

TEACHER DO: Call on a student with a raised hand.

5. TEACHER DO: Point to today's date (or number) on the calendar and say:

TEACHER SAY: Today is (day) the (date) of (month) (year).

 **STUDENTS DO:** Repeat the date.

6. TEACHER DO: Prepare for data math. Either choose a name from the **Calling Sticks** or ask for a volunteer. Write the name of this new student on the board underneath the name and number from the day before.

TEACHER SAY: Let's say the letters in this student's name. Say each letter as I point to it.

 **STUDENTS DO:** Say each letter in the name as the teacher points.

7. TEACHER SAY: Now let's count how many letters are in the name. Starting with the number one, count each letter as I point to it.

 **STUDENTS DO:** Count each letter as the teacher points.

8. TEACHER DO: Write the number of letters in the name on the board beside the name.

TEACHER SAY: (Name of student) has ______ letters in their name. Let's compare the number of letters in (name of student) name to the number of letter in (name of student from yesterday's name) We can use comparing words like more, less, and equal to, to compare their names.

9. TEACHER DO: Using the names given, explain which name has more letters, which one has less, and explain (or use) the term equal if appropriate. Example: Seth has 4 letters in his name and Lapis has 5 letters in her name. Lapis has more letters than Seth. Seth has fewer, or less letters than Lapis.

10. TEACHER DO: Ask students to clap out the new student's name.

TEACHER SAY: We are going to say each letter in the name and clap one time for every letter until we spell out the name.

 **STUDENTS DO:** Clap for each letter of the name.

11. TEACHER DO: Ask students to tap out the student's name.

TEACHER SAY: We are going to do the same thing, but this time instead of clapping our hands we are going to tap our heads.

 **STUDENTS DO:** Students tap their heads for each letter of the name.

12. TEACHER DO: Ask students to high-five the student's name.

TEACHER SAY: We are going to do the same thing one more time but this time we are going to give our Shoulder Partners a high-five for each letter.

 **STUDENTS DO:** Students tap their heads for each letter of the name.

13. TEACHER DO: Introduce and point to the empty graph.

TEACHER SAY: Today we are going to start making a graph. A graph is a way to help people see data, or information. We are going to use this graph to show our data for the number of letters in our names. Across the bottom of the graph I am going to write numbers 2-10.

TEACHER DO: Write numbers 2-10 across the bottom of the graph, leaving an equal amount of space between each number.

14. TEACHER SAY: Let's think about the students' names we have clapped out. What were they?



STUDENTS DO: Students recall and share the names of the classmates whose names have been used in the letter count activities.

15. TEACHER DO: Write each name on one of the paper strips you prepared. Ask students to help you count the letters in each name again.



STUDENTS DO: Count aloud again the number of letters in each name.

16. TEACHER SAY: **(Repeat for each name) Good job! The name _________ has ________ number of letters. I will tape this name above that number. Can someone help me find that number on my graph?**

STUDENTS DO: Student volunteers help the teacher find the number on the graph that represents the number of letters in each name.

17. TEACHER SAY: **Let's look at our graph together!**

TEACHER DO: Talk about the graph with students to make sure they understand that each name above a number has that many letters in it. Explain that they will continue to build the graph together.

18. TEACHER DO: Ask questions, pausing after each one to let students discuss with their shoulder partners.

TEACHER SAY: **Look at the names that are on the graph. Which name has the most letters in their name? How do you know? Who has the fewest letters in their name? How do you know?**



Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: **Let's remember what we talked about yesterday. Who can tell me what a number line is?**

TEACHER DO: Call on a raised hand.

TEACHER SAY: **Right, a number line shows us ordered numbers.**

2. TEACHER SAY: **Today we are going to practice counting up to 6 using beans.**

3. TEACHER DO: Hold the 6 beans so the students can see them all. Touch each one while counting aloud.

TEACHER SAY: **1, 2, 3, 4, 5, 6. Notice that each time I touch a bean I say its number. Watch as I double check by recounting each bean.**



STUDENTS DO: Students watch carefully as the teacher models counting to 6.

4. TEACHER DO: Ask students to count with you several times.



STUDENTS DO: Count aloud with the teacher.

5. TEACHER DO: Ask students to count to 6 in different ways with you.

TEACHER SAY: **Can you clap your hands 6 times? Clap your knees 6 times? Tap your shoulders 6 times?**



STUDENTS DO: Count along with teacher as they clap their hands, clap their knees, and tap their shoulders.

6. TEACHER SAY: **Now let's try counting on our fingers to 6. Count with me as I count up to**

five: 1, 2, 3, 4, 5. Now what am I going to do? I've run out of fingers! Can anyone raise their hand and make a suggestion of how to add one more to 5 to make the number 6?

TEACHER DO: Take student suggestions and then, if it isn't offered, introduce how to use both hands to get to the number 6. Model this three times, then have students practice with you.



STUDENTS DO: Students watch as the teacher models counting on both hands, then practices with the teacher.

7. TEACHER DO: Pass out 6 beans to each student.

8. TEACHER DO: Ask students to count their own beans first by touching each one and then by drawing a circle around it with their finger.

STUDENTS DO: Count their own beans, then draw a circle around each with a finger.

9. TEACHER SAY: Now, work with your Shoulder Partner and take turns counting the beans for each other.



STUDENTS DO: Count their **Shoulder Partner**'s beans aloud.

10. TEACHER DO: When all students have counted the beans multiple times, collect the beans and store them for another day. Praise students for their hard work and assure them they will have additional chances to practice counting.



Share (5-10mins)

Directions

1. Have students practice counting to 6 by clapping their hands 6 times. Then use the **Calling Sticks** to pick a student who can choose another way for the class to practice counting to 6.

Lesson 20 Overview

OUTOMES	KEY VOCABULARY
Students will: • Participate in Calendar Math activities • Practice counting up to 7 • Visually represent quantities 1-7 using pictures and objects • Answer questions about survey data • Compare quantities to find more, less, and equal	• One, two, three, four, five, six, seven • Data • More • Less • Equal • Number line

MATERIALS

Calendar Math Area



Math journal and pencil (see Term Preparation for instructions)



Name graph and paper strips from yesterday's lesson

Counting beans 7 per student and one set of 7 for teacher





Calendar (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to turn to their **Shoulder Partner** and say what month we are in.

TEACHER SAY: **Who can now raise their hand and tell the class what month it is?**

2. TEACHER DO: Ask students to repeat the month.

3. TEACHER DO: Review the days of the week.

TEACHER SAY: **Today, we are going to say the days of the week one at a time, but at our tables. Have the person on the far right [point to the right] of your table start with Sunday, then each person names the next day until you get to the last day of the week. If you don't remember the next day when it's your turn, just say "help" and the rest of your table will help you.**



STUDENTS DO: Name the days of the week one per student at their tables as instructed.

4. TEACHER DO: Ask students to turn and tell their **Shoulder Partner** how many days are in a week.

TEACHER SAY: **Who can now raise their hand and tell the class how many days are in a week?**

TEACHER DO: Call on a student with a raised hand.

5. TEACHER DO: Point to today's date (or number) on the calendar and say:

TEACHER SAY: Today is (day) the (date) of (month) (year).

 **STUDENTS DO:** Repeat the date.

6. TEACHER DO: Prepare for data math.

TEACHER SAY: Today we are going to continue working on our graph. We will continue to count the number of letters in our names and put that information on the graph.

7. TEACHER DO: Either choose a name from the **Calling Sticks** or ask for a volunteer. Write the name of this new student on the board underneath the name and number from the day before.

TEACHER SAY: Let's say the letters in this student's name. Say each letter as I point to it.

 **STUDENTS DO:** Say each letter as teacher points to the letters in the name.

8. TEACHER SAY: Now let's count how many letters are in the name. Starting with the number one, count each letter as I point to it.

 **STUDENTS DO:** Count each letter as teacher points to the letters in the name.

8. TEACHER DO: Write the number of letters in the name on the board beside the name.

TEACHER SAY: (Name of student) has ______ letters in their name. Let's compare the number of letters in (name of student) name to the number of letter in (name of student from yesterday's counting practice) We can use comparing words like more, less, and equal to, to compare their names.

9. TEACHER DO: Using the names given, teacher explains which name has more letters, which one has less, and explains (or uses) the term equal if appropriate. Example: Seth has 4 letters in his name and Lapis has 5 letters in her name. Lapis has more letters than Seth. Seth has fewer, or less letters than Lapis.

10. TEACHER DO: Ask students to clap out the new student's name.

TEACHER SAY: We are going to say each letter in the name and clap one time for every letter until we spell out the name.

 **STUDENTS DO:** Clap for each letter in the student's name.

11. TEACHER DO: Ask students to tap out the student's name.

TEACHER SAY: We are going to do the same thing, but this time instead of clapping our hands we are going to tap our heads.

 **STUDENTS DO:** Students tap their heads for each letter in the student's name.

12. TEACHER DO: Ask students to high-five the student's name.

TEACHER SAY: We are going to do the same thing one more time but this time we are going to give our Shoulder Partners a high-five for each letter.

 **STUDENTS DO:** Students high-five their shoulder partners for each letter in the student's name.

13. TEACHER DO: Point to the graph with numbers across the bottom and name strips taped to it.

TEACHER SAY: Do you remember this graph from yesterday? Can you help me remember what it shows? Turn and tell your Shoulder Partner what this graph is telling us.

 **STUDENTS DO:** Talk to their partners about what the graph shows.

TEACHER DO: Call on students to explain the graph. If no students are able to, explain it to them.

14. TEACHER SAY: Who can raise their hand and remind everyone how many letters were in the name we counted today?

TEACHER DO: Call on a student with a raised hand.

13. TEACHER SAY: Where should I put (student's name) name on our graph?

 **STUDENTS DO:** Offer suggestions as to where the name should go on the graph.

TEACHER DO: If necessary, remind students to think about how many letters are in the name.

15. TEACHER SAY: The name ________ has _______ number of letters. I am going to find that number on our graph and tape this name about that number. Now we have added more data – or information – to our graph!

16. TEACHER DO: Ask questions about the graph, pausing after each one to let students discuss with their **Shoulder Partners**.

TEACHER SAY: Look at the names that are on the graph. Which name has the most letters in their name? How do you know? Who has the fewest letters in their name? How do you know?



Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: Let's remember what we talked about yesterday. Who can tell me what number we made with beans?

TEACHER DO: Call on a raised hand.

2. TEACHER SAY: Right, we practiced the number 6. Can we clap our hands 6 times while counting each clap?

 **STUDENTS DO:** Clap 6 times.

3. TEACHER SAY: Let's tap our heads three times while counting each tap.

 **STUDENTS DO:** Students tap their heads 6 times.

4. TEACHER SAY: Today we are going to practice counting up to 7. 7 is one more than 6.

5. TEACHER DO: Hold the beans so the students can see them all. Touch each one while counting aloud.

TEACHER SAY: 1, 2, 3, 4, 5, 6, 7. Notice that each time I touch a bean I say its number. Watch as I double check by recounting each bean.

 **STUDENTS DO:** Students watch carefully as the teacher models counting to 7.

6. TEACHER DO: Ask students to count with you several times.

 **STUDENTS DO:** Count aloud with the teacher.

7. TEACHER DO: Ask students to count to 7 in different ways with you.

TEACHER SAY: Can you clap your hands 7 times? Tap your toes 7 times? High-five your Shoulder Partner 7 times?

STUDENTS DO: Count along with teacher as they clap their hands, tap their toes, and high-five their shoulder partners.

8. TEACHER SAY: Now let's try counting on our fingers to 7. Count with me as I count up to five: 1, 2, 3, 4, 5. Now what am I going to do? I've run out of fingers! Can anyone remember what we do when we run out of fingers?

TEACHER DO: Take student suggestions and then, if it isn't offered, remind students how to use their other hand to get to the number 7. Model this three times, then have students practice with you.



STUDENTS DO: Students watch as the teacher models counting on both hands, then practice with the teacher.

9. TEACHER DO: Pass out 7 beans to each student.

10. TEACHER DO: Ask students to count their own beans first by touching each one and then by drawing a circle around it with their finger.

STUDENTS DO: Count their own beans, then draw a circle around each with a finger.

12. TEACHER SAY: Now, work with your Shoulder Partner and take turns counting the beans for each other.



STUDENTS DO: Count their **Shoulder Partner**'s beans aloud.

13. TEACHER DO: When all students have counted the beans multiple times, collect the beans and store them for another day. Praise students for their hard work and assure them they will have additional chances to practice counting.



Share (5-10mins)

Directions

1. Have students practice counting to 7 by clapping their hands 7 times. Then use the **Calling Sticks** to pick a student who can choose another way for the class to practice counting to 7.

KINDERGARTEN II

Mathematics

CHAPTER 3

Lessons 21-30

Overview

Lessons 21-30

COMPONENT	DESCRIPTION	TIME
Calendar and Movement	During this daily routine, students develop number sense, calendar sense, early place value concepts, counting fluency, and problem-solving skills. Students explore quantity and practice counting through patterns and movement.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from colleagues' perspectives.	5-10 minutes

Learning Indicators

Throughout this chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY :

- Count objects to tell how many there are
- Count numbers up to 15, as a symbol, meaning, comparing, arranging
- Read and write numerals from 0 to 20
- Write numbers and represent quantities with a number, up to 20
- Understand the relationship between numbers and quantities, up to 20
- Understand the concepts of greater than, less than, and equal to

MEASUREMENT:

- Collect and classify data using objects and drawings (up to 20)

CH 3 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
21	**Students will:** • Participate in Calendar Math activities. • Participate in data collection activities • Answer questions about a class graph • Count to 8 • Visually represent quantities up to 8 using pictures
22	**Students will:** • Participate in Calendar Math activities. • Participate in data collection activities • Answer questions about a class graph • Count to 9 • Visually represent quantities up to 9 using pictures
23	**Students will:** • Participate in Calendar Math activities. • Participate in data collection activities • Answer questions about a class graph • Count to 10 • Visually represent quantities up to 10 using pictures
24	**Students will:** • Participate in Calendar Math activities. • Participate in data collection activities • Answer questions about a class graph • Write numerals 1, 2, and 3 • Visually represent quantities up to 3 using pictures
25	**Students will:** • Participate in Calendar Math activities. • Participate in data collection activities • Answer questions about a class graph • Write numerals 4, 5, and 6 • Visually represent quantities up to 6 using pictures
26	**Students will:** • Participate in Calendar Math activities. • Participate in data collection activities • Answer questions about a class graph • Write numerals 7, 8, and 9 • Visually represent quantities up to 9 using pictures
27	**Students will:** • Participate in Calendar Math activities. • Write numerals up to 10 • Visually represent the quantities up to 10 using pictures • Use the terms greater than and less than.

LESSON	INSTRUCTIONAL FOCUS
28	**Students will:** • Participate in Calendar Math activities. • Write numerals up to 10 • Visually represent quantities up to 10 • Identify the days of the week that are today, tomorrow, and yesterday • Use the terms greater than, less than, and equal to
29	**Students will:** • Participate in Calendar Math activities. • Write numerals up to 10 • Visually represent quantities up to 10 • Identify the days of the week that are today, tomorrow, and yesterday • Compare two quantities • Use the terms greater than, less than, and equal to
30	**Students will:** • Participate in Calendar Math activities. • Write numerals up to 10 • Visually represent quantities up to 10 • Identify the days of the week that are today, tomorrow, and yesterday • Compare two quantities • Use the terms greater than, less than, and equal to

Lesson 21 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Participate in data collection activities
- Answer questions about a class graph
- Count to 8
- Visually represent quantities up to 8 using pictures

KEY VOCABULARY

- Data
- Graph
- Circle
- Triangle
- Rectangle
- Greatest
- Fewest
- Equal

LESSON PREPARATION FOR THE TEACHER

- Create space on the wall or chalkboard to record and display survey data.
- Create a blank graph with 6 evenly-spaced horizontal lines. Leave space at the bottom of the graph to record students' names. Label the horizontal lines 0-5, starting at the bottom with 0. Title the graph: Number of Pets
- Gather 8 objects to use as counters (one set per student. Examples: beans, dry pasta, small stones, buttons, math counters, connecting cubes..

MATERIALS

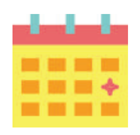
Calendar Math Area



Sets of 8 counting objects (one set per student)



Class graph: Number of Pets
(See lesson preparation for instructions.)



Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to turn to their **Shoulder Partner** and say what month we are in.

2. TEACHER SAY: Who can now raise their hand and tell the class what month it is?



STUDENTS DO: Raise their hand to answer the question.

3. TEACHER DO: Ask students to repeat the month.

STUDENTS DO: Repeat the month.

4. TEACHER DO: Point to the days of the week one at a time, and say each day's name. Ask students to say the names along with you:

TEACHER SAY: We have been learning the days of the week so well! Let's say them together now instead of you repeating each day after me. Sunday… Monday… Tuesday… [continue to Saturday].

STUDENTS DO: Say the days of the week aloud with the teacher.

5. TEACHER DO: Point to the day of the week and say:

TEACHER SAY: Today is _________. Repeat that after me. Today is _________.

STUDENTS DO: Repeat after the teacher.

6. TEACHER DO: Ask students to turn and tell their **Shoulder Partner** how many days are in a week.

TEACHER SAY: Who can now raise their hand and tell the class how many days are in a week?

STUDENTS DO: Raise their hands to answer the question.

7. TEACHER DO: Point to today's date (or number) on the calendar and say:

TEACHER SAY: Today is (day) the (number date) of (month) (year).

8. TEACHER DO: Ask students to repeat the date.



STUDENTS DO: Repeat the date.

9. TEACHER DO: Prepare for movement math.

TEACHER SAY: Let's try another clap pattern today. A pattern is something that repeats. First, I will clap my hands 7 times and say the numbers "1, 2, 3, 4, 5, 6, 7" for each clap. Then I will clap my knees seven times and say the numbers "1, 2, 3, 4, 5, 6, 7" for each clap. Join me when you understand.

10. TEACHER DO: Repeat the pattern multiple times until all students follow along.



STUDENTS DO: Repeat the pattern along with the teacher.

11. TEACHER DO: Introduce the survey question written on the board.

TEACHER SAY: Sometimes during our morning routine we will have a Question of the Day. I have a graph here with a title that says "Number of Pets." A graph is a picture that shows data. This graph will tell us the number of pets 5 students have in our class. On the bottom it says names and I have a place for five names. On the side it has the numbers from 0 to 5. I will call 5 names using the Calling Sticks. If I call your name, please tell me how many pets you have. The first name is (say student's name). How many pets do you have?



STUDENTS DO: Respond if called upon.

12. TEACHER SAY: I will now record your answer on the graph. Class, help me count until I say the number of pets the student has.



STUDENTS DO: Count the lines on the graph to help the teacher record the data.

13. TEACHER DO: Count up from one, moving a finger along the graph until it reaches the correct number. Mark the number of pets with an x on the graph.

TEACHER SAY: This graph now tells me that (name of student) has (number of pets) pets.

14. TEACHER DO: Repeat with the next four names.

15. TEACHER SAY: Let's take a look at the graph and see how to read it.

TEACHER DO: Model how to look at a name and find the X that lines up with a number on the side to find how many pets that person has.

16. TEACHER SAY: Let's see what information it tells us about us and our pets.

- **Who has the greatest number of pets? How can you tell?**

- **Who has the fewest number of pets? How can you tell?**
- **Are any of the numbers equal? How can you tell?**
- **How could you compare (name one student) to (name a different student) using the graph?**

TEACHER DO: Use **Calling Sticks**, have students raise hands or aske them to tell their **Shoulder Partners**.

 **STUDENTS DO:** Draw a circle around their beans and count them.



Learn (25-30 mins)

Directions

1. **TEACHER SAY: Today we are going to practice counting up to 8 using beans.**

2. **TEACHER DO:** Hold the beans so the students can see them all. Touch each one while counting aloud from 1 to 8.

TEACHER SAY: Notice that each time I touch a bean I say its number. Watch as I double check by recounting each bean.

3. **TEACHER DO:** Ask students to count with you several times in several different ways.

TEACHER SAY: Can you clap your hands 8 times? Clap your knees 8 times? Tap your shoulders 8 times?

 **STUDENTS DO:** Clap their hands 8 times, then clap their knees 8 times, then tap their shoulders 8 times.

4. **TEACHER SAY: Now let's try counting on our fingers to 8. Count with me as I get to five: 1, 2, 3, 4, 5. Who remembers what we do next?**

TEACHER DO: Take students' suggestions and then, if it isn't offered, introduce how to use both hands to count to the number 8. Practice this three times.

 **STUDENTS DO:** Practice counting to 8 on their hands.

5. **TEACHER DO:** Pass out 8 beans to each student.

6. **TEACHER SAY: Count your beans by touching each one.**

 **STUDENTS DO:** Touch and count their beans.

7. **TEACHER SAY: Now count your beans by drawing a circle around each one with your finger.**

 **STUDENTS DO:** Draw a circle around their beans and count them.

8. **TEACHER SAY: Now let's practice making some of the shapes we know. Each time you make a new shape, work with your Shoulder Partner to count the beans again.**
   - **Make a circle with the beans.**
   - **Form a triangle with the beans.**
   - **Form a rectangle with the beans.**

 **STUDENTS DO:** Make a circle, triangle, and rectangle with their beans. Working with their **Shoulder Partner**, students take turns counting the beans for each other in the different arrangements.

9. **TEACHER DO:** When all students have counted the beans multiple times, collect the beans and store them for another day.



Share (5-10 mins)

Directions

1. TEACHER DO: Close the lesson by asking students to clap with you again to the number 8 on their hands and on their knees.

 **STUDENTS DO:** Clap and count from 1 to 8.

Lesson 22 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Participate in data collection activities • Answer questions about a class graph • Count to 9 • Visually represent quantities up to 9 using pictures	• Data • Question of the day • Graph • Circle • Triangle • Rectangle • Most • Least • Equal	• Create space on the wall or chalkboard to record and display survey data. • Create a blank graph to record student data. Leave space at the bottom of the graph to record students' names. Label the horizontal lines 0-5, starting at the bottom with 0. Title the graph: Number of Brothers • Gather 9 objects to use as counters (one set per student). Examples: beans, dry pasta, small stones, buttons, math counters, connecting cubes

MATERIALS

Cal
endar Math Area



Sets of 9 counting objects (one per student)



Class graph: Number of Brothers
(Use the same format as the previous day.)

OPTIONAL Video Resources:
TITLE: Counting Sets 7, 8, 9

https://tinyurl.com/ycnocz3f





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to turn to their **Shoulder Partner** and say what month we are in.

2. TEACHER SAY: **Who can now raise their hand and tell the class what month it is?**

 **STUDENTS DO:** Raise their hands to answer the question.

3. TEACHER DO: Ask students to repeat the month.

 **STUDENTS DO:** Repeat the month.

4. TEACHER DO: Point to the days of the week one at a time, and say each day's name. Ask students to say the names along with you:

TEACHER SAY: We have been learning the days of the week so well! Let's say them together now instead of you repeating each day after me. Sunday… Monday… Tuesday… [continue to Saturday]

STUDENTS DO: Say the days of the week aloud with the teacher.

5. TEACHER DO: Point to the day of the week.

TEACHER SAY: Today is _________. Repeat that after me. Today is __________.

STUDENTS DO: Repeat after the teacher.

6. TEACHER DO: Ask students to turn and tell their **Shoulder Partner** how many days are in a week.

TEACHER SAY: Who can now raise their hand and tell the class how many days are in a week?



STUDENTS DO: Raise their hands to answer the question.

7. TEACHER DO: Point to today's date (or number) on the calendar and say:

TEACHER SAY: Today is (day) the (number date) of (month) (year).

8. TEACHER DO: Ask students to repeat the date.



STUDENTS DO: Repeat the date.

9. TEACHER DO: Prepare for movement math.

TEACHER SAY: Let's try another clap pattern today. A pattern is something that repeats. First, I will clap my hands 8 times and say the numbers "1, 2, 3, 4, 5, 6, 7, 8" for each clap. Then I will clap my knees seven times and say the numbers "1, 2, 3, 4, 5, 6, 7, 8" for each clap. Join me when you understand.

10. TEACHER DO: Repeat the pattern multiple times until all students follow along.



STUDENTS DO: Repeat the pattern along with the teacher.

11. TEACHER DO: Introduce the survey question written on the board.

TEACHER SAY: Sometimes during our morning routine, we will have a Question of the Day. I have a graph here with a title that says "Number of Brothers." A graph is a picture that shows data. This graph will tell us the number of pets 5 students have in our class. On the bottom it says names and I have a place for five names. On the side it has the numbers from 0 to 5. I will call 5 names using the Calling Sticks. If I call your name please tell me how many brothers you have. The first name is (say student's name). How many brothers do you have?



STUDENTS DO: Respond if called upon.

12. TEACHER SAY: I will now record your answer on the graph. Class, help me count until I say the number of brothers the student has.



STUDENTS DO: Count the lines on the graph to help the teacher record the data.

13. TEACHER DO: Count up from one, moving a finger along the graph until it reaches the correct number. Mark the number of brothers with an x on the graph.

TEACHER SAY: This graph now tells me that (name of student) has (number of brothers) brothers.

14. TEACHER DO: Repeat with the next four names.

15. TEACHER SAY: Let's take a look at the graph and see what information it tells us about us and our brothers.

- **Who has the most brothers? How can you tell?**
- **Who has the least brothers? How can you tell?**
- **Are any of the numbers equal? How can you tell?**
- **How could you compare (name one student) to (name a different student) using the graph?**

TEACHER DO: Use **Calling Sticks** for answers, have students raise hands, or tell their **Shoulder Partners**.



Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: Let's remember what we talked about yesterday. Who can tell me what number we made with beans?

 **STUDENTS DO:** Raise hands to answer the question.

2. TEACHER DO: Call on a raised hand.

TEACHER SAY: Right, we practiced the number 8. Can we clap our hands 8 times while counting each clap? (Clap each number to represent the number learned in yesterday's lesson). Let's tap our desks 8 times while counting each tap: (Tap each number to represent the number learned in yesterday's lesson). Today we are going to practice counting up to 9. 9 is one more than 8.

3. TEACHER DO: Tell students that today we are going to practice counting up to 9 using beans. Hold the beans so the students can see them all. Touch each one while counting aloud.

TEACHER SAY: Notice that each time I touch a bean I say its number. Watch as I double check by recounting each bean.

 **STUDENTS DO:** Carefully observe the teacher.

4. TEACHER DO: Ask students to count to 9 in different ways with you.

TEACHER SAY: Can you clap your hands 9 times? Tap your cheeks 9 times? Tap your heads 9 times?

 **STUDENTS DO:** Clap their hands as they count from 1 to 9, then tap their cheeks as they count, then tap their heads as they count.

5. TEACHER SAY: Now let's try counting on our fingers to 9. Count with me as I get to five: 1, 2, 3, 4, 5. Now who remembers what we do next?

 **STUDENTS DO:** Count on their fingers to 5, then raise their hands to answer the teacher's question.

6. TEACHER DO: Take students' suggestions and then, if it isn't offered, introduce how to count on two hands to get to the number 9. Practice this three times.

 **STUDENTS DO:** Count to 9 on their hands.

7. TEACHER DO: Pass out 9 beans, paper, and a pencil to each student.

8. TEACHER SAY: Count your beans by touching each one.



STUDENTS DO: Touch and count their beans.

9. TEACHER SAY: Now count your beans by drawing a circle around each one with your finger.



STUDENTS DO: Draw a circle around their beans and count them.

10. TEACHER SAY: Now let's practice making some of the shapes we know. Each time you make a new shape, work with your Shoulder Partner to count the beans again.

- **Make a circle with the beans.**
- **Form a triangle with the beans.**
- **Form a rectangle with the beans.**



STUDENTS DO: Make a circle, triangle, and rectangle with their beans. Working with their **Shoulder Partner**, students take turns counting the beans for each other in the different arrangements.

11. TEACHER DO: When all students have counted the beans multiple times, collect the beans and store them for another day.



Share (5-10 mins)

Directions

1. TEACHER SAY: Does the number of beans change when we rearrange them in a different order?



STUDENT DO: Raise their hands to answer the teacher's question.

2. TEACHER DO: Ask students to clap with you again to the number 9 on their hands and on their knees. Then call on a student and have them suggest a different move to practice 9 times.



STUDENT DO: Clap their hands and count to 9, then suggest a different counting movement.

Lesson 23 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Participate in data collection activities
- Answer questions about a class graph
- Count to 10
- Visually represent quantities up to 10 using pictures

KEY VOCABULARY

- Question of the day
- Graph
- Compare
- Most
- Least
- Equal

LESSON PREPARATION FOR THE TEACHER

- Create space on the wall or chalkboard to record and display survey data.
- Create a blank graph to record student data. Leave space at the bottom of the graph to record students' names. Label the horizontal lines 0-5, starting at the bottom with 0. Title the graph: Number of Sisters.
- Gather 10 objects to use as counters (one set per student.). Examples: beans, dry pasta, small stones, buttons, math counters, connecting cubes.

MATERIALS

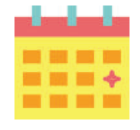
Calendar Math Area



Sets of 10 counting objects (one set per student)



Class graph: Number of Sisters
(Use the same format as the previous day.)



Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to turn to their **Shoulder Partner** and say what month we are in.

2. TEACHER SAY: Who can now raise their hand and tell the class what month it is?

 **STUDENTS DO:** Raise their hand to answer the question.

3. TEACHER DO: Ask students to repeat the month.

 **STUDENTS DO:** Repeat the month.

4. TEACHER DO: Point to the days of the week one at a time, and say each day's name. Ask students to say the names along with you.

TEACHER SAY: We have been learning the days of the week so well! Let's say them together now instead of you repeating each day after me. Sunday… Monday… Tuesday… [continue to Saturday]

 **STUDENTS DO:** Say the days of the week aloud with the teacher.

5. TEACHER DO: Point to the day of the week and say:

TEACHER SAY: Today is _________. Repeat that after me. Today is __________.

 **STUDENTS DO:** Repeat after the teacher.

6. TEACHER DO: Ask students to turn and tell their **Shoulder Partner** how many days are in a week.

TEACHER SAY: Who can now raise their hand and tell the class how many days are in a week?

 **STUDENTS DO:** Raise their hands to answer the question.

7. TEACHER DO: Point to today's date (or number) on the calendar and say:

TEACHER SAY: Today is (day) the (number date) of (month) (year).

8. TEACHER DO: Ask students to repeat the date.

 **STUDENTS DO:** Repeat the date.

9. TEACHER DO: Prepare for movement math.

TEACHER SAY: Let's try something new for Movement Math today. Let's practice counting to 9 by having students one at a time stand up behind your table. As a class, we will all count the number of students. Everyone raise both your hands when you reach the number "9." Students will stay standing and we will start back at "1" with the next student after "9."

 **STUDENTS DO:** Students will participate in Movement Math.

10. TEACHER DO: Repeat the pattern multiple times until all students are standing.

11. TEACHER DO: Have students sit back down. Introduce the survey question.

TEACHER SAY: Let's turn to our Question of the Day. I have a graph with a title that says "Number of Sisters". A graph is a picture that shows data. This graph will tell us the number of sisters 5 students have in our class. On the bottom it says names and I have a place for five names. On the side it has the numbers from 0 to 5. I will call 5 names using the Calling Sticks. If I call your name, please tell me how many sisters you have. The first name is (say student's name). How many sisters do you have?

 **STUDENTS DO:** Raise their hands when called upon. All students observe as the teacher creates the class graph using students' responses.

12. TEACHER SAY: I will now record your answer on the graph. Help me count until I say the number of sisters the student has.

 **STUDENTS DO:** Count the lines on the graph to help the teacher record the data.

13. TEACHER DO: Count up from one, moving a finger along the graph until it reaches the correct number. Mark the number of sisters with an x on the graph.

TEACHER SAY: This graph now tells me that (name of student) has (number of sisters) sisters.

14. TEACHER DO: Repeat with the next four names.

15. TEACHER SAY: Let's take a look at the graph and see what information it tells us about us and our sisters.

- **Who has the most sisters? How can you tell?**
- **Who has the least sisters? How can you tell?**
- **Are any of the numbers equal? How can you tell?**
- **How could you compare (name one student) to (name a different student) using the graph?**

TEACHER DO: Use **Calling Sticks** for answers, have students raise hands, or tell their **Shoulder Partners**.



Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: Let's remember what we talked about yesterday. Who can tell me what number we made with beans?



STUDENTS DO: Raise hands to answer the question.

2. TEACHER DO: Call on a raised hand.

TEACHER SAY: Right, we practiced the number 9. Can we clap our hands 9 times while counting each clap? (Clap each number to represent the number learned in yesterday's lesson). Let's tap our cheeks 9 times while counting each tap: (Tap each number to represent the number learned in yesterday's lesson). Today we are going to practice counting up to 10. 10 is one more than 9.

3. TEACHER DO: Tell students that today we are going to practice counting up to 10 using beans. Hold the beans so the students can see them all. Touch each one while counting aloud.

TEACHER SAY: Notice that each time I touch a bean I say its number. Watch as I double check by recounting each bean.



STUDENTS DO: Carefully observe the teacher.

4. TEACHER DO: Ask students to count to 9 in different ways with you.

TEACHER SAY: Can you clap your hands 10 times? Can you tap your toes 10 times? Can you tap your nose 10 times?



STUDENTS DO: Clap their hands as they count from 1 to 10, then tap their cheeks as they count, then tap their heads as they count.

5. TEACHER SAY: Now let's try counting on our fingers to 10. Count with me as I get to five: 1, 2, 3, 4, 5. Now who remembers what we do next?



STUDENTS DO: Count on their fingers to 5, then raise their hands to answer the teacher's question.

6. TEACHER DO: Take students' suggestions and then, if it isn't offered, introduce how to count on two hands to get to the number 10. Practice this three times.



STUDENTS DO: Count to 10 on their hands.

TEACHER SAY: Ten is a special number, because it uses all our fingers!

7. TEACHER DO: Pass out 9 beans, paper, and a pencil to each student.

TEACHER SAY: Count your beans by touching each one.



STUDENTS DO: Touch and count their beans.

8. TEACHER SAY: Now count your beans by drawing a circle around each one with your finger.



STUDENTS DO: Draw a circle around their beans and count them.

9. TEACHER SAY: Work with your Shoulder Partner to count the beans again. Help each other and make sure you count from 1 to 10.



STUDENTS DO: Work with their shoulder partners to count their beans.

10. TEACHER SAY: Great job counting! If you take your beans and move them around, do you still have 10? Watch as I take my beans and count them in a line (Move the beans into a line and count aloud.) "1, 2, 3, 4, 5, 6, 7, 8, 9, 10".

Now watch as I move my line and scatter my beans. (Scatter the beans around.) Do I still have 10? Raise your hand and tell me what you think.



STUDENTS DO: Count the beans and answer the teacher's questions. Students may come up to the teacher if called upon.

Note for the Teacher: Students answers may vary. Some will think you still have ten but others might think the number has changed. Not all of them may have this skill yet.

11. TEACHER SAY: Let's check and see. Help me count these beans again "1, 2, 3, 4, 5, 6, 7, 8, 9, 10". I still have 10 beans! Now you try.



STUDENTS DO: Students will move their beans around and recount to see if they still have 10 beans.

TEACHER DO: When all students have counted the beans multiple times, collect the beans and store them for another day.



Share (5-10 mins)

Directions

1. TEACHER DO: Close the lesson by asking students to clap with you again to the number 10 on their hands and on their knees.



STUDENTS DO: Clap and count to 10.

Lesson 24 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Participate in data collection activities • Answer questions about a class graph • Write numerals 1, 2, and 3 • Visually represent quantities up to 3 using pictures	• Pattern • Data • Graph • Most • Least	• Prepare a Favorite Fruits graph for the lesson. Choose 8 appropriate fruit options like figs, dates, bananas, oranges and pomegranates. Write them on the bottom of the graph and draw a little picture of each one, if possible. For this graph, you will be recording students' votes as X's.

MATERIALS

Calendar Math Area



Class graph: Favorite Fruits
(Use the same format as the previous day.)

Math Journal



Colored pencils, chalk, crayons, or markers to use on the board or graph that correspond with the "Favorite colors" survey question





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to turn to their **Shoulder Partner** and say what month we are in.

2. TEACHER SAY: Who can now raise their hand and tell the class what month it is?

 **STUDENTS DO:** Raise their hand to answer the question.

TEACHER DO: Call on a raised hand.

3. TEACHER DO: Ask students to repeat the month.

 **STUDENTS DO:** Repeat the month.

4. TEACHER DO: Point to the days of the week one at a time, and say each day's name. Ask students to say the names along with you:

TEACHER SAY: You are all getting so good at the days of the week! Let's go back and forth to name the days today. I'll start with "Sunday" then you say "Monday" and so on, until we get to the end of the week. Ready?

5. TEACHER DO: Point to the day of the week and yourself and say "Sunday," then point to Monday and the class to have them say "Monday." Alternate until the end of the week. Then repeat the days one more time.

STUDENTS DO: Say the next day of the week when the teacher points at the class.

6. TEACHER DO: Point to the day of the week and say:

TEACHER SAY: Today is __________. Repeat that after me. Today is ___________.



STUDENTS DO: Repeat after the teacher.

7. TEACHER DO: Ask students to turn and tell their **Shoulder Partner** how many days are in a week.

TEACHER SAY: Who can now raise their hand and tell the class how many days are in a week?



STUDENTS DO: Raise their hands to answer the question.

8. TEACHER DO: Point to today's date (or number) on the calendar and say:

TEACHER SAY: Today is (day) the (number date) of (month) (year).

9. TEACHER DO: Ask students to repeat the date.



STUDENTS DO: Repeat the date.

10. TEACHER DO: Prepare for movement math.

TEACHER SAY: Let's try another clap pattern today. Who can tell me what a pattern is? Please raise your hand.



STUDENTS DO: Offer definitions of a pattern.

TEACHER DO: If necessary, explain that a pattern is something that is repeated over and over. It could be a picture or a number or an action.

11. TEACHER SAY: I am going to count from 1 to 10. I will say 1 and clap my hands. Then I will say 2 and pat my knees. Then, when I say 3 I will clap my hands. What do you think I will do when I say 4? I will pat my knees! I am repeating these actions in a pattern as I count. Watch me. Join me when you are ready.

TEACHER DO: Model the clap-pat-clap-pat pattern as you count from 1 to 10. Repeat the pattern multiple times until all students follow along.



STUDENTS DO: Students will count from 1 to 10 as they repeat the clap-pat-clap-pat pattern along with the teacher.

12. TEACHER DO: Introduce the survey question written on the board.

TEACHER SAY: Today we will be taking a different type of survey and showing our information in a graph. This survey will tell us our favorite types of fruit.

13. TEACHER DO: Choose 8 appropriate fruit options like figs, dates, bananas, oranges and pomegranates. Write them on the bottom of the graph and draw a little picture of each one, if possible.

14. TEACHER SAY: This graph is called Favorite Fruits. There are 8 fruits listed at the bottom of our graph. (Read the names of the fruits aloud.)

I want you to think about what your favorite fruit is. When I say a fruit, please raise your hand if it is your favorite. You can only choose one. Who can explain the directions again for the class?



STUDENTS DO: Volunteer explains the directions aloud to the class to ensure that everyone understands the task.

15. TEACHER SAY: If your favorite fruit is (name the first fruit on the graph), please raise your hand.

STUDENTS DO: Students will raise their hands to vote for the first fruit.

16. TEACHER SAY: (Number of hands raised) students' favorite fruit is ____. Now I find the word and picture _____ on the bottom of the graph. I will write ____ X's above the fruits to show that ____ students chose it as their favorite. Count with me as I write the X's.

STUDENTS DO: Count aloud the number of X's the teacher writes on the graph.

17. TEACHER DO: Continue with the other fruits and record the data on the graph.

18. TEACHER SAY:
Which fruit do the least people in our class like? What fruit do most people in our class like? How could you compare (name of fruit) to (name a different fruit) using the graph? Are any of the numbers equal? (Ask any additional questions you would like to ask students about the graph.)



Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: Let's remember what we talked about yesterday. Who can tell me what number we made with beans?



STUDENTS DO: Raise hands to answer the teacher's question.

TEACHER DO: Call on a raised hand.

2. TEACHER SAY: Right, we practiced the number 10. Can we clap our hands 10 times while counting each clap? (Clap each number to represent the number learned in yesterday's lesson). Let's tap our toes 10 times while counting each tap. (Tap each number to represent the number learned in yesterday's lesson).



STUDENTS DO: Clap their hands and tap their toes.

3. TEACHER SAY: Today we are going to practice writing some numbers. First we will write in the air and then we will write in our math journals. We're just getting started, so don't worry if your numbers aren't perfect yet.

4. TEACHER DO: Hand out math journals and keep one for yourself. On the board, draw the numeral 1, write the word "one", and draw 1 of something.

5. TEACHER SAY: Let's practice writing the number 1 in the air. Stand up and raise your hand. Pretend your finger is your pencil. Let's all write the number 1 together.

TEACHER DO: Write the number 1 in the air as you say, "One." Students should do it along with you. Repeat several times.



STUDENTS DO: Stand up and write the number 1 in the air with their fingers.

6. TEACHER SAY: Please sit down and open your math journal to the next clean page. Write the number 1 in your math journal. Write it three times.



STUDENTS DO: Sit and open their math journals to the next clean page. Students write the number 1 three times in their journals.

7. TEACHER SAY: Now, draw one of something. It could be a shape, a dot, or an animal.

 **STUDENTS DO:** Draw one of something in their math journals.

8. TEACHER DO: Repeat the process of standing and writing in the air, writing in the math journal, and drawing in the math journal for 2 and 3. Walk around the room to check students' work and provide help if it is needed. Take note of students who may be able to show their work as a model for the other students.

 **STUDENTS DO:** Repeat the process of standing and writing in the air, writing in the math journal, and drawing in the math journal for 2 and 3.

9. TEACHER DO: When students finish, have them show their **Shoulder Partner** their work.

 **STUDENTS DO:** Show their work to their shoulder partners.

10. TEACHER DO: Have student volunteers come to the front of the room and show their colleagues their work.



Share (5-10 mins)

Directions

1. TEACHER DO: Close the lesson by asking the students to share something they learned today. They can tell their **Shoulder Partner** first. Use the **Calling Sticks** to pick three students to share with the whole class.

2. TEACHER SAY: Turn to your Shoulder Partner and tell them something you learned today.

 **STUDENTS DO:** Talk to their shoulder partners, then raise their hands to share what they learned with the class.

TEACHER DO: Call on students to share what they learned.

Lesson 25 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Participate in data collection activities • Answer questions about a class graph • Write numerals 4, 5, and 6 • Visually represent quantities up to 6 using pictures	• Pattern • Data • Graph • Compare • Most • Least	• Create a class graph called Favorite Colors. Write color names across the bottom of a large sheet of paper, chart paper, or the chalkboard: Red, Orange, Yellow, Green, Blue, Purple. If possible, use crayons or colored markers to help students who do not know all of the color names. You will write X's to represent students' responses.

MATERIALS

Calendar Math Area



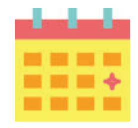
Class graph: Favorite Colors
(Use the same format as the previous day.)

Math Journal



Colored pencils, chalk, crayons, or markers to use on the board or graph that correspond with the "Favorite Colors" survey question





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to turn to their **Shoulder Partner** and say what month we are in.

2. TEACHER SAY: Who can now raise their hand and tell the class what month it is?

 **STUDENTS DO:** Raise their hand to answer the question.

3. TEACHER DO: Ask students to repeat the month.

 **STUDENTS DO:** Repeat the month.

4. TEACHER DO: Point to the days of the week one at a time, and say each day's name. Ask students to say the names along with you:

TEACHER SAY: You are all getting so good at the days of the week! Let's go back and forth to name the days today. I'll start with "Sunday" then you say "Monday" and so on, until we get to the end of the week. Ready?

5. TEACHER DO: Point to the day of the week and yourself and say "Sunday," then point to Monday and the class to have them say "Monday." Alternate until the end of the week. Then repeat the days one more time.

 **STUDENTS DO:** Say the next day of the week when the teacher points at the class.

6. TEACHER DO: Point to the day of the week and say:

TEACHER SAY: Today is _________. Repeat that after me. Today is __________.

 **STUDENTS DO:** Repeat after the teacher.

7. TEACHER DO: Ask students to turn and tell their **Shoulder Partner** how many days are in a week.

TEACHER SAY: Who can now raise their hand and tell the class how many days are in a week?

 **STUDENTS DO:** Raise their hands to answer the question.

8. TEACHER DO: Point to today's date (or number) on the calendar and say:

TEACHER SAY: Today is (day) the (number date) of (month) (year).

9. TEACHER DO: Ask students to repeat the date.

 **STUDENTS DO:** Repeat the date.

10. TEACHER DO: Prepare for movement math.

TEACHER SAY: Let's try another clap pattern today. Who can tell me what a pattern is? Please raise your hand.

 **STUDENTS DO:** Offer definitions of a pattern.

TEACHER DO: If necessary, explain that a pattern is something that is repeated over and over. It could be a picture or a number or an action.

11. TEACHER SAY: First, let's count all the numbers between 1 and 10: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. Who can raise their hand and pick one of those numbers?

12. TEACHER DO: Call on a student to pick a number.

 **STUDENTS DO:** Respond if called upon.

13. TEACHER SAY: We are going to do clap-stomp-clap-stomp pattern to count to the number ______ chose. Let me show you and then we'll do it together.

TEACHER DO: Count to the number chosen by the student. Alternate clapping and stomping and stop when you get to the number. Ask students to do it along with you. Repeat 2-3 times.

 **STUDENTS DO:** Students first watch as the teacher models the pattern and counting, then join in.

14. TEACHER DO: Repeat this process two more times, asking two different students to choose a number between 1 and 10 and pattern counting to that number. Repeat the pattern multiple times until all students follow along.

 **STUDENTS DO:** Suggest numbers they would like to count to and repeat the clap-pat-clap-pat pattern along with the teacher.

15. TEACHER DO: Transition to the survey question on the board.

TEACHER SAY: Today we will be taking a different type of survey and showing our information in a graph. This survey will tell us our favorite types of colors.

TEACHER DO: Write the names of colors on the bottom of the graph: Red, Blue, Yellow, Green, Orange, Purple.

16. TEACHER SAY: I want you to think about what your favorite color is. When I say a color, please raise your hand if it is your favorite. You can only choose one. If your favorite color is ____ , please raise your hand.



STUDENTS DO: Raise their hands to vote for one color and observe as the teacher writes the X's on the graph, helping the teacher count when asked.

TEACHER SAY: (Number of hands raised) favorite color is blue. Now I find the word and color on the bottom of the graph. How many hands were raised? I write that many X's above that color. This shows that ____ number of students' favorite color is blue.

17. TEACHER DO: Repeat the process for all colors on the graph.



STUDENTS DO: Raise their hands to vote for one color and observe as the teacher writes the X's on the graph, helping the teacher count when asked.

18. TEACHER DO: Ask the students questions about the graph to help them build understanding and share their thinking with their colleagues.

TEACHER SAY: Which color is the most popular color in our class today? How can you tell? Which color do the least amount of people in our class like? How can you tell? How could you compare how popular (name of color) is to (name a different color) using the graph? Are any of the numbers equal?



STUDENTS DO: Raise their hands to answer the questions and share their thinking about the graph.

TEACHER DO: Use **Calling Sticks** for answers, have students raise hands, or tell their **Shoulder Partners**.



Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: Let's remember what we talked about yesterday. Who can tell me what numbers we practiced writing?



STUDENTS DO: Raise hands to answer the teacher's question.

TEACHER DO: Call on a raised hand.

2. TEACHER SAY: Right, we practiced writing the numbers 1, 2, and 3. Let's stand up and write them together in the air.



STUDENTS DO: Stand up and practice writing the numbers 1, 2, and 3 in the air at the teacher's direction.

12. TEACHER SAY: Today we are going to practice writing new numbers. First we will write in the air and then we will write in our math journals. Remember, we're just getting started, so don't worry if your numbers aren't perfect yet.

13. TEACHER DO: Hand out math journals and keep one for yourself. On the board, draw numeral 4, write the word "four", and draw 4 of something.

14. TEACHER SAY: Let's practice writing the number 4 in the air. Stand up and raise your hand. Pretend your finger is your pencil. Let's all write the number 4 together.

TEACHER DO: Write the number 4 in the air as you say, "Four." Students should do it along with you. Repeat several times.

STUDENTS DO: Stand up and write the number 4 in the air with their fingers.

15. TEACHER SAY: Please sit down and open your math journal to the next clean page. Write the number 4 in your math journal. Write it three times.



STUDENTS DO: Sit and open their math journals to the next clean page. Students write the number 4 three times in their journals.

16. TEACHER SAY: Now, draw four of something. It could be shapes, dots, flowers, animals, or smiley faces – whatever you like, but nothing too big!



STUDENTS DO: Draw four of something in their math journals.

17. TEACHER DO: Repeat the process of standing and writing in the air, writing in the math journal, and drawing in the math journal for 5 and 6. Walk around the room to check students' work and provide help if it is needed. Take note of students who may be able to show their work as a model for the other students.



STUDENTS DO: Repeat the process of standing and writing in the air, writing in the math journal, and drawing in the math journal for 5 and 6.

18. TEACHER DO: When students finish, have them show their **Shoulder Partner** their work.



STUDENTS DO: Show their work to their shoulder partners.

19. TEACHER DO: Have student volunteers come to the front of the room and show their colleagues their work.



Share (5-10 mins)

Directions

1. TEACHER DO: Close the lesson by asking the students to share something they learned today. They can tell their **Shoulder Partner** first and then use the **Calling Sticks** to pick three students to share with the whole class.

2. TEACHER SAY: Turn to your Shoulder Partner and tell them something you learned today.



STUDENTS DO: Talk to their shoulder partners, then raise their hands to share what they learned with the class.

TEACHER DO: Call on students to share what they learned.

Lesson 26 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Participate in data collection activities • Answer questions about a class graph • Write numerals 7, 8, and 9 • Visually represent quantities up to 9 using pictures	• Pattern • Question of the day • Graph • Compare • Most • Least • Equal	• Create a class graph called Favorite Animal. Write 6-8 animal names across the bottom of a large sheet of paper, chart paper, or the chalkboard. If possible, draw or glue small pictures of the animals next to each name. You will write X's to represent students' responses.

MATERIALS

Calendar Math Area

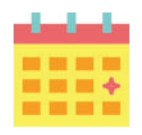


Class graph: Favorite Animal
(Use the same format as the previous day.)

Math Journal



Optional: Pictures of the animals you included on the graph



Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to whisper the name of the current month into their hands.

TEACHER SAY: Who can now raise their hand and tell the class what month it is?

TEACHER DO: Ask students to repeat the month.

 **STUDENTS DO:** Repeat the month.

2. TEACHER DO: Ask students to say the names of the days along with you.

TEACHER SAY: Let's go back and forth to name the days again today. I'll start again with "Sunday" then you say "Monday" and so on, until we get to the end of the week. Ready?

TEACHER DO: Point to the day of the week and yourself and say "Sunday," then point to Monday and the class to have them say "Monday." Alternate until the end of the week. Then repeat the days one more time.

 **STUDENTS DO:** Say the names of the days of the week, alternating with the teacher.

3. TEACHER DO: Point to the day of the week.

TEACHER SAY: Today is _________. Repeat that after me. Today is __________.

TEACHER DO: Ask student to turn and tell their **Shoulder Partner** how many days are in a week.

STUDENTS DO: Students turn to their shoulder partners and tell each other how many days are in a week.

4. TEACHER SAY: Who can now raise their hand and tell the class how many days are in a week?

STUDENTS DO: Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand to answer the question.

STUDENTS DO: Selected student answers the question.

5. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year).

TEACHER DO: Ask students to repeat the date.

STUDENTS DO: Repeat the date.

6. TEACHER DO: Prepare for movement math.

7. TEACHER SAY: Let's try another movement pattern today. Who can tell me what a pattern is? Please raise your hand.

STUDENTS DO: Offer definitions of a pattern.

TEACHER DO: If needed, explain what a pattern is.

8. TEACHER SAY: Today we're going to try a tricky one! We're going to do a pattern with three movements as we count to 10 together! But you're going to give me the movements. What do you want the first movement to be? Raise your hand.

STUDENTS DO: Raise their hands and suggest a movement.

TEACHER DO: Call on a student with a raised hand and announce the first movement. Demonstrate the movement for students. Repeat this process for the next two movements.

9. TEACHER SAY: Now that we have our three movements, let's practice doing them together. The steps are _______, _______, and _______.

TEACHER DO: Perform the pattern along with students.

10. TEACHER SAY: Great job! Now let's do our pattern and count from 1 to 10 together.

STUDENTS DO: Perform the pattern and count from 1 to 10 along with the teacher.

11. TEACHER DO: Transition to the survey question on the board.

12. TEACHER SAY: Today we will be taking a different type of survey and showing our information in a graph. This survey will tell us our favorite animal. On the bottom of our graph, I have written the names of several animals. I will read them to you. Pay attention, because you can only vote for one animal!

TEACHER DO: Read the name of each animal aloud.

TEACHER SAY: Let's get started collecting data! When I say an animal, please raise your hand if it is your favorite. Remember, you can only choose one.

13. TEACHER SAY: **If your favorite animal is a _____, please raise your hand.**

 STUDENTS DO: Students will vote once for their favorite animals.

14. TEACHER SAY: **(Number of hands raised) favorite animal is a ______.**

15. TEACHER DO: Write an X for each raised hand above the animal students are voting for. Continue to ask students to vote on the other animals and records the data on the graph.

 STUDENTS DO: Observe as the teacher writes X's and help count when asked by the teacher.

16. TEACHER DO: Ask the students questions about the graph to help build their assessment.

TEACHER SAY: **Which animal do people like the most in our class? How do you know? Which animal do the least amount of people in our class like? How do you know? Are any of the numbers equal?**

TEACHER DO: Use **Calling Sticks** for answers, have students raise hands, or tell their **Shoulder Partners**.

 STUDENTS DO: Selected students share their answers.



Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: **Who can remind the class what numbers we practiced writing?**

 STUDENTS DO: Raise hands to answer the teacher's question.

2. TEACHER SAY: **Right, so far we have practiced writing the numbers 1, 2, 3, 4, 5, and 6. Let's stand up and write them together in the air.**

 STUDENTS DO: Stand up and practice writing the numbers 1, 2, 3, 4, 5, and 6 in the air at the teacher's direction.

3. TEACHER SAY: **Today we are going to practice writing new numbers. First we will write in the air and then we will write in our math journals. Remember, we're just getting started, so don't worry if your numbers aren't perfect yet.**

4. TEACHER DO: Hand out math journals and keep one for yourself. On the board, draw the numeral 7, write the word "seven", and draw 7 of something.

5. TEACHER SAY: **Let's practice writing the number 7 in the air. Stand up and raise your hand. Pretend your finger is your pencil. Let's all write the number 7 together.**

TEACHER DO: Write the number 7 in the air as you say, "Seven." Students should do it along with you. Repeat several times.

 STUDENTS DO: Stand up and write the number 7 in the air with their fingers.

6. TEACHER SAY: **Please sit down and open your math journal to the next clean page. Write the number 7 in your math journal. Write it three times.**

 STUDENTS DO: Sit and open their math journals to the next clean page. Students write the number 7 three times in their journals.

7. TEACHER SAY: **Now, draw seven of something. It could be circles, dots, flowers, or animals – anything you like, but nothing too big!**

 **STUDENTS DO:** Draw seven of something in their math journals.

8. TEACHER DO: Repeat the process of standing and writing in the air, writing in the math journal, and drawing in the math journal for 8 and 9. Walk around the room to check students' work and provide help if it is needed. Take note of students who may be able to show their work as a model for the other students.

 **STUDENTS DO:** Repeat the process of standing and writing in the air, writing in the math journal, and drawing in the math journal for 8 and 9.

9. TEACHER DO: When students finish, have them show their **Shoulder Partner** their work.

 **STUDENTS DO:** Show their work to their **Shoulder Partner.**

TEACHER DO: Have student volunteers come to the front of the room and show their colleagues their work.

 **STUDENTS DO:** Share their work with their colleagues.



Share (5-10 mins)

Directions

1. TEACHER DO: Close the lesson by asking volunteers to come up to the board and write a number between 1 and 9 (it may be helpful if you choose the number). Have students at their seats write the numbers in the air.

 **STUDENTS DO:** Selected students write on the board. Other students write in the air.

Lesson 27 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Write numerals up to 10 • Visually represent the quantities up to 10 using pictures • Use the terms greater than and less than	• Pattern • Compare • Data • Graph • More • Less • Greater than • Less than	• Create a class graph called Favorite Animal. Write 6-8 animal names across the bottom of a large sheet of paper, chart paper, or the chalkboard. If possible, draw or glue small pictures of the animals next to each name. You will write X's to represent students' responses.

MATERIALS: Same as previous day



Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to turn to their **Shoulder Partner** and say what month we are in.

TEACHER SAY: Who can now raise their hand and tell the class what month it is?

TEACHER DO: Ask students to repeat the month.

 **STUDENTS DO:** Raise their hands to answer the question.

2. TEACHER DO: Ask students to say the names of the days.

TEACHER SAY: Today, I want you to tell me what the days of the week are. When I point to a day, you say it out loud. If you need help, I will help you. Ready?

TEACHER DO: Point to the day of the week and the class and wait for them to say "Sunday." If students need help, read the word and ask them to say it after you. Repeat the process for all of the days of the week.

3. TEACHER SAY: Who knows what today is?

 **STUDENTS DO:** Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand. If students to not know, tell them. If students do know, repeat after them.

TEACHER SAY: Today is _________. Say it with me. Today is __________.

4. TEACHER DO: Ask student to turn and tell their **Shoulder Partner** how many days are in a week.

TEACHER SAY: Who can now raise their hand and tell the class how many days are in a week? Who can tell me a day that we go to school? Who can tell me a day that you do not go to school?

STUDENTS DO: Talk to their shoulder partners, then share their thinking with the teacher when called on.

5. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: **Today is (day) the (number date) of (month) (year).**

TEACHER DO: Ask students to repeat the date.



STUDENTS DO: Repeat the date.

6. TEACHER DO: Prepare for movement math.

7. TEACHER SAY: **Yesterday, I asked you to help me create a pattern. You did such a great job coming up with movements that we're going to do that again today! We will do a new pattern with three movements as we count to 10 together. What do you want the first movement to be? Raise your hand.**



STUDENTS DO: Raise their hands and suggest a movement.

TEACHER DO: Call on a student with a raised hand and announce the first movement. Demonstrate the movement for students. Repeat this process for the next two movements.

8. TEACHER SAY: **Now that we have our three movements, let's practice doing them together. The steps are ________, ________, and ________.**

TEACHER DO: Perform the pattern along with students.

9. TEACHER SAY: **Great job! Now let's do our pattern and count from 1 to 10 together.**



STUDENTS DO: Perform the pattern and count from 1 to 10 along with the teacher.

10. TEACHER DO: Transition to the Learn portion of the lesson.



Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: **Who can remind the class what numbers we practiced writing?**



STUDENTS DO: Raise hands to answer the teacher's question.

TEACHER DO: Call on a raised hand.

2. TEACHER SAY: **Right, so far we have practiced writing the numbers 1, 2, 3, 4, 5, 6, 7, 8, and 9. Let's stand up and write them together in the air.**



STUDENTS DO: Stand up and practice writing the numbers 1, 2, 3, 4, 5, 6, 7, 8, and 9 in the air at the teacher's direction.

3. TEACHER SAY: **Today we are going to practice a new number. Does anyone know what it is?**



STUDENTS DO: Raised their hands to answer the question.

TEACHER DO: Call on a student with a raised hand. If necessary, tell students they will practice writing 10 today.

4. TEACHER SAY: **First we will write in the air and then we will write in our math journals. Remember, we're just getting started, so don't worry if your numbers aren't perfect yet.**

5. TEACHER DO: Hand out math journals and keep one for yourself.

6. TEACHER DO: On the board, draw the numeral 10, write the word "ten", and draw 7 of something.

7. TEACHER SAY: **Do you notice anything different about 10 from the other numbers we've written?**

 **STUDENTS DO:** Raise their hands to answer the question.

TEACHER DO: Use **Calling Sticks** to call on a student. If necessary, explain that the number 10 has two digits (or numbers) – a 1 and a 0.

8. TEACHER SAY: Let's practice writing the number 10 in the air. Stand up and raise your hand. Pretend your finger is your pencil. Let's all write the number 10 together.

TEACHER DO: Write the number 10 in the air as you say, "Ten." Students should do it along with you. Repeat several times.

 **STUDENTS DO:** Stand up and write the number 10 in the air with their fingers.

9. TEACHER SAY: **Please sit down and open your math journal to the next clean page. Write the number 10 in your math journal. Write it three times.**

 **STUDENTS DO:** Sit and open their math journals to the next clean page. Students write the number 10 three times in their journals.

10. TEACHER SAY: **Now, draw ten of something.**

 **STUDENTS DO:** Draw ten of something in their math journals.

11. TEACHER DO: Walk around the room to check students' work and provide help if it is needed. Take note of students who may be able to show their work as a model for the other students.

Have 10 student volunteers stand at the front of the room and show their colleagues their work.

 **STUDENTS DO:** Volunteer their work with their colleagues.

12. TEACHER DO: Collect math journals from the students who are standing.

TEACHER SAY: You are going to learn a few new math words today. The words will help them compare numbers. When we compare numbers, we talk about how they are the alike and different.

13. TEACHER DO: Arrange standing students in one group of 7 and one group of 3.

TEACHER SAY: **There are two groups of students up here. Which group has more students?**

 **STUDENTS DO:** Identify the group with 7 members.

14. TEACHER SAY: **How many students are in this group? (7) How many students are in this group? (3) We can say that the number of students in this group is greater than the number of students in that group. We can also say that 7 is greater than 3. Repeat after me: "7 is greater than 3."**

 **STUDENTS DO:** Respond to the teacher's questions and observe as the teacher explains the term greater than. Repeat after the teacher.

15. TEACHER SAY: **We can say that the number of students in this group (the group with 3 students) is less than the number of students in this group (the group with 7 students). We can also say that 3 is less than 7. Repeat after me: "3 is less than 7."**

 **STUDENTS DO:** Respond to the teacher's questions and observe as the teacher explains the term greater than. Repeat after the teacher.

16. TEACHER DO: Repeat the process by splitting the ten students into two different groups (for

example, 8 and 2 or 6 and 4). Ask students to count how many are in each group, tell which group has more students and which has less students, then use the terms greater than and less than to compare the groups.



STUDENTS DO: Respond to the teacher's questions and observe as the teacher explains the term greater than. Count the number of students in each group and compare them using the terms more and less. Repeat after the teacher to use the terms greater than and less than..

TEACHER DO: Close the lesson by telling students they will learn a new term tomorrow that they can use to compare numbers.



Share (5-10 mins)

Directions

1. **TEACHER DO:** Ask students to turn to their **Shoulder Partners** what they learned about comparing numbers.



STUDENTS DO: Share what they learned about comparing numbers with their **Shoulder Partner**.

TEACHER DO: Use **Calling Sticks** to select 3 students to share their learning with the class.



STUDENTS DO: Selected students talk about what they learned.

Lesson 28 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Participate in Calendar Math activities • Write numerals up to 10 • Visually represent quantities up to 10 • Identify the days of the week that are today, tomorrow, and yesterday • Use the terms greater than, less than, and equal to	• Today • Tomorrow • Yesterday • Compare • More • Less • Greater than • Less than

MATERIALS

Calendar Math Area



Math Journal





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to turn to their **Shoulder Partner** and say what month we are in.

TEACHER SAY: Who can now raise their hand and tell the class what month it is?

 **STUDENTS DO:** Raise their hands to answer the question.

TEACHER DO: Ask students to repeat the month.

 **STUDENTS DO:** Repeat the month.

2. TEACHER DO: Ask students to say the names of the days along with you, repeating two at a time.

TEACHER SAY: Today, let's say the days two at a time. Repeat after me. "Sunday, Monday." "Tuesday, Wednesday." "Thursday, Friday." What's left? [Take answers]. That's right, Saturday!

 **STUDENTS DO:** Repeat after the teacher and raise hands to respond to the question.

3. TEACHER DO: Write the word today on the chalkboard (or somewhere students can see it). Point to the word.

TEACHER SAY: We've been using this word a lot. This word says today. Who can explain what today means?

 **STUDENTS DO:** Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand. If necessary, explain that today means the present day, or the day we are in right now.

4. TEACHER SAY: Who knows what today is?

 **STUDENTS DO:** Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand. If students to not know, tell them. If students do know, repeat after them.

5. TEACHER SAY: Today is _________. Say it with me. Today is __________.

 **STUDENTS DO:** Say the day with the teacher.

6. TEACHER DO: Write the word tomorrow where all students can see it.

TEACHER SAY: Does anyone know what tomorrow means? Tomorrow is the day the comes right after today. If today is ______, what day is tomorrow? Whisper into your hand what day you think tomorrow is.

 **STUDENTS DO:** Whisper their answers into their hands.

7. TEACHER SAY: Who can now raise their hand and tell the class what day they think tomorrow is?

 **STUDENTS DO:** Raise their hands to answer the question.

8. TEACHER DO: Make sure all students understand what day is tomorrow. Write the word yesterday where all students can see it.

TEACHER SAY: Does anyone know what yesterday means? Yesterday is the day the came right before today. If today is ______, what day was yesterday? Whisper into your hand what day you think yesterday is.

 **STUDENTS DO:** Whisper their answers into their hands.

9. TEACHER SAY: Who can now raise their hand and tell the class what day they think yesterday is?

 **STUDENTS DO:** Raise their hands to answer the question.

TEACHER DO: Make sure all students understand what day is yesterday.

TEACHER SAY: From now on when we do Calendar Math together, we will talk about today, tomorrow, and yesterday.

10. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year).

TEACHER DO: Ask students to repeat the date.

 **STUDENTS DO:** Repeat the date.

Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: Let's remember what we talked about yesterday. Who can tell me what number we wrote? What new words did we learn and use? First turn to your Shoulder Partner and share your thinking. Then raise your hands to share your thinking with all of your colleagues.



STUDENTS DO: Share their answers with their shoulder partners.

TEACHER DO: Call on a raised hand.

2. TEACHER SAY: Right, we practiced writing the number 10. We learned the words greater than and less than. Today we're going to review all of the numbers we have learned from 1-10, use the words greater than and less then, and learn a new word! First, let's practice writing all of the numbers in the air together. Stand up and write with me.



STUDENTS DO: Stand and write each number from 1 to 10 in the air as the teacher calls it out.

3. TEACHER SAY: Let's practice using greater than and less than again. I am going to draw shapes on the board (or overhead projector).

TEACHER DO: Choose a number and draw that many shapes on the board. Draw a circle around the shapes. Choose another number and draw that many shapes on the board a little bit away from the first set of shapes. Draw a circle around those shapes.

4. TEACHER SAY: Who can come up and count the shapes in these sets?



STUDENTS DO: Students volunteer to come up to the board. The selected student counts the shapes in the sets.

TEACHER DO: Write the number in each set on the board.

5. TEACHER SAY: Which number is greater? Which number is less?

TEACHER DO: Work with students to help them understand which number is greater and which number is less. Have students practice using the terms. Answer any questions students have about determining which number is greater and which number is less.



STUDENTS DO: Identify which number is greater and which is less.

6. TEACHER DO: Erase the first two sets of shapes, then draw two new sets, but make them equal amounts (for example, both sets could contain 4 shapes).

7. TEACHER SAY: Who can come up and count the shapes in these sets?



STUDENTS DO: Students volunteer to come up to the board. The selected student counts the shapes in the sets.

TEACHER DO: Write the number in each set on the board.

8. TEACHER SAY: Which number is greater? Which number is less?



STUDENTS DO: Discuss their thinking.Students should recognize that the sets contain the same number of shapes.

9. TEACHER SAY: When two numbers are the same, we say that they are equal. ______ and ______ are equal to each other. They are the same amount. Who can tell me two numbers that are equal?

 **STUDENTS DO:** Raise their hands to share two numbers that are equal.

10. TEACHER SAY: I'm going to draw sets of shapes on the chalkboard and you are going use the words greater than, less than, and equal to to compare them.

TEACHER DO: Draw two sets of shapes on the board. Work with students to help them compare the shapes and use the terms greater than, less than, and equal to. Repeat 3-4 times, if possible.

 **STUDENTS DO:** Compare shapes using vocabulary terms.



Share (5-10 mins)

Directions

1. TEACHER DO: Close the lesson by asking the students to explain to their **Shoulder Partners** what greater than, less than, and equal to mean.

 **STUDENTS DO:** Talk to their shoulder partners and then share their thinking with the whole class.

Lesson 29 Overview

OUTCOMES	KEY VOCABULARY	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Write numerals up to 10 • Visually represent quantities up to 10 • Identify the days of the week that are today, tomorrow, and yesterday • Compare two quantities • Use the terms greater than, less than, and equal to	• Today • Tomorrow • Yesterday • Compare • More • Less • Greater than • Less than	• Gather 10 objects to use as counters (one set per student.). Examples: beans, dry pasta, small stones, buttons, math counters, connecting cubes.

MATERIALS

Calendar Math Area



Sets of 10 counters (one set per pair of students)



OPTIONAL Video Resource: Comparing Sets

https://tinyurl.com/y8r2bjxg



OPTIONAL Video Resource: Comparing Numbers 0-9

https://tinyurl.com/y7cvgax7





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to turn to their **Shoulder Partner** and say what month we are in.

TEACHER SAY: **Who can now raise their hand and tell the class what month it is?**



STUDENTS DO: Repeat the month

TEACHER DO: Ask students to repeat the month.

2. TEACHER DO: Ask students to say the names of the days along with you, repeating two at a time:

TEACHER SAY: **Today, let's say the days two at a time. Repeat after me. "Sunday, Monday." "Tuesday, Wednesday." "Thursday, Friday." What's left? [Take answers]. That's right, Saturday!**

3. TEACHER DO: Write the word today on the chalkboard (or somewhere students can see it). Point to the word.

TEACHER SAY: **This word says today. Who can remember what today means?**

 **STUDENTS DO:** Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand. If necessary, explain that today means the present day, or the day we are in right now.

4. TEACHER SAY: Who knows what today is?

 **STUDENTS DO:** Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand. If students to not know, tell them. If students do know, repeat after them.

5. TEACHER SAY: Today is _________. Say it with me. Today is __________.

 **STUDENTS DO:** Say today's date with the teacher.

6. TEACHER DO: Write the word tomorrow where all students can see it.

TEACHER SAY: Does anyone remember what tomorrow means? Tomorrow is the day the comes right after today. If today is ______, what day is tomorrow? Whisper into your hand what day you think tomorrow is.

 **STUDENTS DO:** Whisper their answers into their hands.

7. TEACHER SAY: Who can now raise their hand and tell the class what day they think tomorrow is?

 **STUDENTS DO:** Raise their hands to answer the question.

8. TEACHER DO: Make sure all students understand what day is tomorrow. Write the word yesterday where all students can see it.

TEACHER SAY: Does anyone remember what yesterday means? Yesterday is the day the came right before today. If today is ______, what day was yesterday? Whisper into your hand what day you think yesterday is.

 **STUDENTS DO:** Whisper their answers into their hands.

9. TEACHER SAY: Who can now raise their hand and tell the class what day they think yesterday is?

 **STUDENTS DO:** Raise their hands to answer the question.

TEACHER DO: Make sure all students understand what day is yesterday.

TEACHER SAY: From now on when we do Calendar Math together, we will talk about today, tomorrow, and yesterday.

10. TEACHER DO: Point to today's date (or number) on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year).

TEACHER DO: Ask students to repeat the date.

 **STUDENTS DO:** Repeat the date.



Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

2. TEACHER SAY: Let's remember what we have been learning about. What numbers have we been learning about? What math words have we learned and practiced?

TEACHER DO: Call on a raised hand.

3. TEACHER SAY: Right, we've written the number 1 through 10, we've drawn pictures of quantities 1 through 10, and practiced using the terms greater than, less than, and equal to. Today we are going to work with a partner. You will work with your partners to compare quantities and practice using our new math vocabulary words.

TEACHER DO: Assign partners.

4. TEACHER SAY: We are going to practice counting and comparing our beans. I have 10 beans in this bag. I am going to take one handful out of the bag and put it down in front of me. A handful can be big or small, but I want to make sure I always have some beans left in the bag. Help me point to each bean in my handful and count them. Notice that as I count them I will line them up.

 **STUDENTS DO:** Students help teacher count beans.

5. TEACHER SAY: Now I will take out the beans left in the bag and make a separate pile. I will line these beans up and count them one by one. Please help me count.

 **STUDENTS DO:** Students help teacher count beans.

6. TEACHER SAY: I have ___ beans in my first pile and ___ beans in my second pile. Which pile has the bigger number? How do you know?

 **STUDENTS DO:** Raise their hands to explain their thinking.

TEACHER SAY: Remember that in math we say (insert number from larger pile) is greater than (insert number from smaller pile. We also say (insert number from smaller pile) is less than (insert number from greater pile). Remember that if the two sets of beans have the same number, we say they are equal.

7. TEACHER DO: Hand out math journals and keep one for yourself. Have students turn to the next page.

8. TEACHER SAY: We will be recording and comparing our handfuls in our math journals. Inside my math journal I will draw two circles.

7. TEACHER DO: Draw two circles in your math journal.

9. TEACHER SAY: Watch as I draw dots inside the first circle to represent my first pile of beans. I had ______ beans, so I will draw _____ dots.

How many beans were in my second pile? I will draw _____ dots in my second circle to represent my second pile of beans.

Now, I'm going to compare my piles of beans.

TEACHER DO: Model for students how to compare the two piles of beans using greater than and less than or equal to.

 **STUDENTS DO:** Observe carefully so they understand what to do. Students should ask questions if they are confused.

10. TEACHER DO: Ask students if they have any questions about the activity. Make sure students understand the directions.



STUDENTS DO: Work with a partner to create piles of beans, draw dots to represent each pile of beans, and compare the beans by using the words greater than, less than, and equal to. Repeat 2-3 times (as time allows).

TEACHER DO: Walk around the classroom to monitor students' work and provide help and support as needed.



Share (5-10 mins)

Directions

1. TEACHER DO: Close the lesson by asking pairs of students to share their work with the class.



STUDENTS DO: Raise their hands to volunteer. Partners explain their work to their colleagues using the math terms greater than, less than, and equal to.

Lesson 30 Overview

OUTCOMES	KEY VOCABULARY
Students will: • Participate in Calendar Math activities • Write numerals up to 10 • Visually represent quantities up to 10 • Identify the days of the week that are today, tomorrow, and yesterday • Compare two quantities • Use the terms greater than, less than, and equal to	• Today • Tomorrow • Yesterday • Compare • More • Less • Greater than • Less than

MATERIALS

Calendar Math Area



Class graphs displaying data in X's created during this Chapter

OPTIONAL Video Resource:
Comparing Sets

https://tinyurl.com/y8r2bjxg



OPTIONAL Video Resource:
Comparing Numbers 0-9

https://tinyurl.com/y7cvgax7





Calendar and Movement Math (15-20 mins)

Directions

1. TEACHER DO: Point to the top of the calendar and ask students to turn to their **Shoulder Partner** and say what month we are in.

TEACHER SAY: Who can now raise their hand and tell the class what month it is? Ask students to repeat the month.

2. TEACHER DO: Ask students to say the names of the days along with you, repeating two at a time:

TEACHER SAY: Today, let's say all of the days together.

 **STUDENTS DO:** Say the days of the week with the teacher.

3. TEACHER DO: Write the word today on the chalkboard (or somewhere students can see it). Point to the word.

TEACHER SAY: This word says today. Who can remember what today means?

 **STUDENTS DO:** Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand. If necessary, explain that today means the present day, or the day we are in right now.

4. TEACHER SAY: **Who knows what today is?**

 **STUDENTS DO:** Raise their hands to answer the question.

TEACHER DO: Call on a student with a raised hand. If students to not know, tell them. If students do know, repeat after them.

5. TEACHER SAY: **Today is __________. Say it with me. Today is ___________.**

 **STUDENTS DO:** Say today's date with the teacher.

6. TEACHER DO: Write the word tomorrow where all students can see it.

TEACHER SAY: **Does anyone remember what tomorrow means? Tomorrow is the day the comes right after today. If today is _______, what day is tomorrow? Whisper into your hand what day you think tomorrow is.**

 **STUDENTS DO:** Whisper their answers into their hands.

7. TEACHER SAY: **Who can now raise their hand and tell the class what day they think tomorrow is?**

 **STUDENTS DO:** Raise their hands to answer the question.

8. TEACHER DO: Make sure all students understand what day is tomorrow. Write the word yesterday where all students can see it.

TEACHER SAY: **Does anyone remember what yesterday means? Yesterday is the day the came right before today. If today is _______, what day was yesterday? Whisper into your hand what day you think yesterday is.**

 **STUDENTS DO:** Whisper their answers into their hands.

9. TEACHER SAY: **Who can now raise their hand and tell the class what day they think yesterday is?**

 **STUDENTS DO:** Raise their hands to answer the question.

10. TEACHER DO: Make sure all students understand what day is yesterday. Point to today's date (or number) on the calendar.

TEACHER SAY: **Today is (day) the (number date) of (month) (year).**

TEACHER DO: Ask students to repeat the date.

 **STUDENTS DO:** Repeat the date.



Learn (25-30 mins)

Directions

1. TEACHER DO: Review yesterday's lesson.

TEACHER SAY: **Oh no, I've forgotten everything we learned about greater than, less than, and equal to! Who can help me remember?**

 **STUDENTS DO:** Raise their hands to help the teacher "understand" what greater than, less than, and equal to mean. When asked, students will provide examples to help the teacher "understand."

2. TEACHER DO: Display one of the class graphs so that all students can see.

TEACHER SAY: We have talked a lot about comparing numbers, quantities, or amounts. We can do that with numbers, with our counter beans, and with our graphs.

3. TEACHER SAY: Look at this graph. Does anyone remember what it is called?



STUDENTS DO: Raise their hands to answer the question. They may use the information at the bottom of the graph as a clue.

Note for the Teacher: For this part of the lesson, please select the class graphs you prefer to use this learning activity. Ask students questions appropriate for the graphs you have selected to help them compare data using the terms greater than, less than, and equal to. Some sample language is provided, but customize it to fit the graphs you have selected.

TEACHER SAY:

- **This graph is called _______________. Let's compare some of the numbers of votes on this graph.**
- **I can see that ______ has more votes than ______.**
- **I can say that the number of votes for _____ is greater than the number of votes for _____. Now you say it along with me.**
- **I can also say that the number of votes for ______ is less than the number of votes for ______. Now you say it along with me.**
- **The number of people who voted for ______ and ______ is equal! Now you say it along with me.**
- **Look at these two items on the graph: ______ and ______. Which has the greater number of votes? Which has less votes?**

Can you find two items that have an equal number of votes?

Who would like to come up here and help me compare data on this graph?



STUDENTS DO: Raise hands to answer the teacher's questions, volunteer to help the teacher compare data on the graph, and repeat after the teacher when asked.



Share (5-10 mins)

Directions

1. TEACHER DO: Close the lesson by asking students to share with the class what they have learned about greater than, less than, and equal to.



STUDENTS DO: Selected students share what they have learned about greater than , less than, and equal to.

KINDERGARTEN II

Mathematics

CHAPTER 4

Lessons 31-40

Overview

Lessons 31-40

COMPONENT	DESCRIPTION	TIME
Calendar	During this daily routine, students develop number sense, calendar sense, early place value concepts, counting fluency, and problem-solving skills.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from colleagues' perspectives.	5-10 minutes

Learning Indicators

Throughout days 31-40, students will work toward the following learning indicators:

COUNTING AND CARDINALITY:

- Count objects to tell how many there are
- Count by ones to 20
- Read and write numerals up to 20
- Understand the relationship between numbers and quantities up to 20
- Apply the understanding that each successive number name refers to a quantity that is one larger as they count
- Identify the number of objects in familiar groupings without counting

OPERATIONS AND ALGEBRAIC THINKING:

- Add and subtract within 20 using strategies such as
    - using objects or drawings to represent a problem
    - decomposing numbers into pairs in more than one way
- Classify objects by their attributes (color, size, and shape)

CH 4 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
31	**Students will:** • Participate in Calendar Math activities • Compare and sort based on attributes • Count from 1 to 10 • Write numerals 1 and 2 • Find “one more” and “one less” than a number • Demonstrate understanding of the relationship between number and quantity up to 5
32	**Students will:** • Participate in Calendar Math activities • Compare and sort based on attributes • Count from 1 to 10 • Write numerals 3 and 4 • Find “one more” and “one less” than a number • Demonstrate understanding of the relationship between number and quantity up to 5
33	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Identify the number of objects in familiar groupings • Demonstrate understanding of the relationship between number and quantity up to 5
34	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write numerals 1-5 • Identify the number of objects in familiar groupings • Demonstrate understanding of the relationship between number and quantity up to 5
35	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Write numerals 6-10 • Demonstrate understanding of the relationship between number and quantity up to 5 • Apply strategies to determine whether two parts make a given whole (5)
36	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Demonstrate understanding of the relationship between number and quantity up to 5 • Identify the number of objects in familiar groupings • Apply strategies to determine whether two parts make a given whole (5)

LESSON	INSTRUCTIONAL FOCUS
37	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Sky write numbers 1-10 • Use the counting on strategy within 10 • Compose numbers to 5 using actions, drawings, and models
38	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Use the counting on strategy within 10 • Represent composition to 5 using numeric number bonds
39	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Use the counting on strategy within 10 • Represent composition to 5 using numeric number bonds
40	**Students will:** • Participate in Calendar Math activities • Count from 1 to 10 • Use the counting on strategy within 10 • Represent composition to 5 using numeric number bonds

Lesson 31 Overview

OVERVIEW

Students will:

- Participate in Calendar Math activities
- Compare and sort based on attributes
- Count from 1 to 10
- Write numerals 1 and 2
- Find one more and one less than a number
- Demonstrate understanding of the relationship between number and quantity up to 5

STUDENT VOCABULARY:

- First
- Five frame
- One less
- One more
- Sort

LESSON PREPARATION FOR THE TEACHER

- Create or print out 1 five frame.
- Create or print out five frame worksheets (one per student). (See Lesson Materials for an example.)
- Create or print out number strips (one per student). (See Lesson Materials for an example.)
- Gather objects for students to use as counters (Examples: beans, dry pasta, buttons, stones). You will need 1 per students and 1 for the teacher.

MATERIALS

Calendar Math Area



Number chart to 100



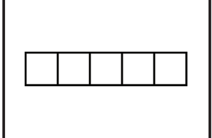
Clear counting jar



Rubber band for counting sticks



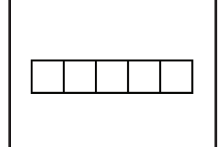
Five Frame (from previous lesson)



Math journal and pencil



Five Frame worksheets (one per student)



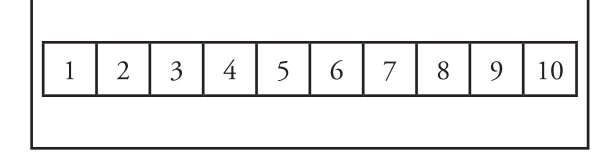
Beans or other counters



Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band



Number strips



Calendar (15-20 mins)

Directions

1. **TEACHER SAY:** **Let's transition to Math by looking at our Calendar.**

TEACHER DO: Point to the top of the calendar

TEACHER SAY: **Please turn to your Shoulder Partner and say what month we are in.**

 **STUDENTS DO:** Turn and talk to their partners.

TEACHER SAY: **Let's practice saying the month together different ways. Can you say the month like a mouse in a whisper voice?**

 **STUDENTS DO:** Whisper the name of the month in unison.

TEACHER SAY: **Can you roar the month like a lion?**

 **STUDENTS DO:** Roar the name of the month in unison.

TEACHER SAY: **Can you hiss the name like a snake?**

 **STUDENTS DO:** Hiss the name of the month in unison.

2. **TEACHER DO:** Point to the days of the week and say each day's name one at a time. Ask students to repeat the names after each.

 **STUDENTS DO:** Repeat the names of the days of the week after the teacher.

TEACHER SAY: **Turn to your Shoulder Partner and tell them how many days you think are in a week.**

 **STUDENTS DO:** Tell a **Shoulder Partner** how many days they think are in a week.

TEACHER SAY: **Who can now raise their hand and tell the class how many days are in a week?**

 **STUDENTS DO:** Raise hands to volunteer. Selected student answers the question.

TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: **Today is (day) the (number date) of (month) (year). Can you repeat date with me?**

 **STUDENTS DO:** Repeat date.

3. **TEACHER DO:** Prepare for movement math.

TEACHER SAY: **Let's pause our calendar work for a moment to do some movement math. I am going to ask you some questions so we can learn more about how things can be sorted. Sorting means putting things together that share something in common. Ready? If you are a girl stand up.**

 **STUDENTS DO:** Girls stand up.

TEACHER SAY: **Girls, now clap twice.**

 **STUDENTS DO:** Girls clap twice.

TEACHER SAY: **Girls, now sit down.**

TEACHER DO: Repeat the steps with the following categories (make your own up to be most relevant to your class):

- Boys
- Students who have pets
- Students who don't have pets
- Students wearing glasses
- Students not wearing glasses

 **STUDENTS DO:** Follow directions of the teacher, participating in the appropriate categories.

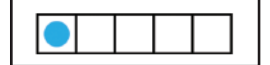
4. TEACHER SAY: Nice job. When some of us stood up, we were sorting ourselves. OK, back to the calendar. This week we are going to be recording our days in school using two new tools. The first is a counting stick.

TEACHER DO: Pick up counting stick to show students.

TEACHER SAY: We are starting our count today. Today is the first day. The stick represents the number 1. We will put it in our counting jar. Every day we will add 1 more stick to help us count days.

TEACHER DO: Put one counting stick into the counting jar.

TEACHER SAY: We will also be counting on a tool called a five frame. A five frame can help us count and learn to see numbers in our minds.



TEACHER DO: Hold up a blank five frame.

Note for the Teacher: If you do not have five frames to pass out to the class, adjust the following activity to have students draw a five frame in the math journal.

TEACHER SAY: Since today is the first day, I will draw one circle and color it in to represent today. Our five frame shows 1.

TEACHER DO: Hold up a five frame worksheet.

TEACHER SAY: Now I will hand out a five frame sheet to each of you. Can you make your frames look like mine? Practice making a five frame showing the number 1 five times. See the blank line at the end of each five frame? Write the numeral 1 on each line after you show 1 on the five frame.

TEACHER DO: Hand out the five frames.

 **STUDENTS DO:** Fill out all of the five frames to represent 1 and write the numeral on the line at the end of each row.

TEACHER DO: Walk around the room to see how students are progressing and correct any evidence of misunderstanding. Take note of students who may need additional instruction.

5. TEACHER SAY: Well done making 1 on your five frame. Let's look at our five frames more closely. First, I will count the number of squares.

TEACHER DO: Point to each square and count aloud to five.

TEACHER SAY: The frame has 5 squares and only one has a dot in it. How many more dots would we need to make 5? Watch me count the empty boxes.

TEACHER DO: Points to each empty square and count aloud.

TEACHER SAY: Please help me count this time: 1, 2, 3, 4.

 **STUDENTS DO:** Count empty squares with teacher.

TEACHER SAY: Nice job counting. We need 4 more dots to make 5. So, my five frame tells me that 1 and 4 make 5.

TEACHER DO: Review this by showing 1 dot and counting again the 4 empty squares.

TEACHER SAY: Great job! We will use our five frames again tomorrow.



Learn (25-30 mins)

Directions

1. **TEACHER DO:** Hand out number strips and 1 bean or other type of counter to students.

TEACHER SAY: Today I am going to show you how to play a game called Beep. You all have a number line with the numbers 1-10 on them. Let's start by pointing to each number and saying its name aloud. When I point to the number 1, I say 1. Help me count all the way to 10.



STUDENTS DO: Count 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 while pointing to each number on the number strips.

TEACHER SAY: Great, today we are just going to look at the numbers 1-5. Let's count those numbers again together: 1, 2, 3, 4, 5.



STUDENTS DO: Count with teacher.

2. **TEACHER SAY: This time I am going to cover one of the numbers from 1-5 with my counter, but it is a secret and I am not going to tell you which number it is.**

TEACHER DO: Place a counter in one of the squares between 1 and 5, partially covering the number.

TEACHER SAY: I am going to count again, but when I get to the number I have covered, I will say beep instead of saying the number. Your job is to listen and to point to each number on your number line as I say it. If you hear me say beep instead of a number, mark it on your number strip with your counter.

TEACHER DO: Say the numbers on your number line, when you get to the number covered by the marker say beep.



STUDENTS DO: Listen to the teacher count and cover the number that is replaced with the word beep with a counter.

3. **TEACHER SAY: Ok, who can raise their hand and tell me which number I replaced with the word beep?**



STUDENTS DO: Raise a hand to answer if called on.

TEACHER DO: Call on a student to tell you the number you covered on your number line.

4. **TEACHER SAY: That's right, the beep number was ________. Now remove your counter and put your finger on that number. Who can tell me what is one more than the number? Remember one more means the next number that comes in line?**



STUDENTS DO: Remove the counters and put a finger on the same number. Raise their hands when they know the answer to the question.

TEACHER DO: Call on a student to tell the class the answer.

5. **TEACHER SAY: Great, now let's put our fingers back on the beep number: _______. This time I want you to use your number line and figure out what is one less than the beep number. When you know, share your answer with your Shoulder Partner.**



STUDENTS DO: Use their number lines to figure out the answer and share it with a **Shoulder Partner**.

TEACHER SAY: Can someone raise their hand and share their answer with the class? What is one less than ____?

TEACHER DO: Call on a student with hand raised to answer for the class. Repeat the Beep game with 3 more numbers following the above steps.

6. TEACHER DO: Hand out math journals keeping one for yourself. Prepare to write on the board.

TEACHER SAY: Please turn to the next blank page in your math journal. Let's practice writing the number 1 and 2. Watch as I make the number 1 on the board. Now, write the number 1 five times across the top of your page.

 **STUDENTS DO:** Write the number 1 five times in the math journal.

TEACHER DO: As students work, walk around to monitor their progress. Take note of students who may need additional instruction.

7. TEACHER SAY: Now, let's practice writing the number 2. Watch again as I write it on the board. Now, write the number 2 five times across your page below the number 1.

 **STUDENTS DO:** Write the number 2 five times in the math journal.

TEACHER DO: As students work, walk around to monitor their progress. Take note of students who may need additional instruction.

TEACHER SAY: Well done! Take a look at your work. Let's celebrate. Circle the number you are most proud of and hold your math journal in the air.

 **STUDENTS DO:** Circle the best-written number on the page and hold up the math journal.

8. TEACHER SAY: We are getting so good at writing 1 and 2! Now I am going to tell you a math story and I want you to draw a picture to go along with it. Today I am going to show you how to do this, but soon you will be able to do it by yourselves.

TEACHER DO: Move to the board so that you can draw a picture that goes with the story.

TEACHER SAY: Yesterday, I saw 3 cats. Watch as I draw 3 cats on the board. I'm just going to draw a circle for the heads and triangles for the ears.

TEACHER DO: Draw 3 simple cats on the board.

TEACHER SAY: Now, you draw 3 cats in your math journal.

 **STUDENTS DO:** Draw three cats in the math journal.

TEACHER SAY: I put out some water for them, and then 1 more cat joined them. Watch as I add 1 new cat. Can you add 1 new cat to your drawing?

TEACHER DO: Draw 1 more cat on the board.

 **STUDENTS DO:** Draw 1 more cat in the math journal.

TEACHER SAY: My question for you is: How many cats are there now? How do you know? Look at your drawing to help you answer. Tell your Shoulder Partner.

 **STUDENTS DO:** Count the 4 cats and tell a **Shoulder Partner** their answer.

TEACHER DO: Use **Calling Sticks** to choose a student to share their answer with the class and explain how they know.

 **STUDENTS DO:** Selected student shares the answer and explains how they got it.

TEACHER DO: Using the example on the board, show students how to double check their work by recounting the cats.

TEACHER SAY: **Wave at me if you got the right answer!**

 **STUDENTS DO:** Wave at the teacher if they added correctly.



Share (5 mins)

Directions

1. **TEACHER SAY:** **In my story, I put out water for 3 cats and 4 cats drank. Why do you think I wanted to know how many cats were drinking the water? How is counting helpful to us? How do you use counting in your life? Turn and talk with your Shoulder Partner about your ideas.**

 **STUDENTS DO:** Discuss the questions with a **Shoulder Partner**.

TEACHER DO: Use **Calling Sticks** to choose a few students to answer why the number of cats matters.

TEACHER SAY: **You all have such good ideas! Counting was important in my story because I needed to know how much water to put out for the cats. I really enjoyed hearing how you use counting in your life!**

Lesson 32 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Compare and sort based on attributes
- Count from 1 to 10
- Write numerals 3 and 4
- Find “one more” and “one less” than a number
- Demonstrate understanding of the relationship between number and quantity up to 5

STUDENT VOCABULARY:

- Five frame
- One less
- One more
- Second
- Sort

LESSON PREPARATION FOR THE TEACHER

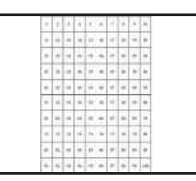
- Create or print out five frame worksheets (one per student).

MATERIALS

Calendar Math Area



Number chart to 100



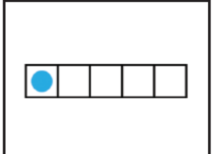
Clear counting jar



Rubber band for counting sticks



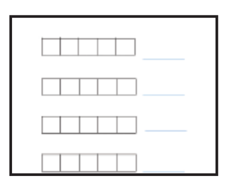
Five Frame (from previous lesson)



Math journal and pencil



Five Frame worksheets (one per student)



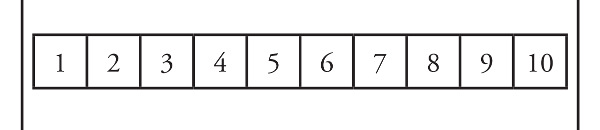
Beans or other counters



Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band



Number strips





Calendar (15-20 mins)

Directions

1. TEACHER SAY: Let's begin our math time again today by looking at the calendar.

TEACHER DO: Point to the top of the calendar.

TEACHER SAY: Turn to your Shoulder Partner and say what month we are in.

 **STUDENTS DO:** Turn and talk to their partners.

TEACHER SAY: Let's practice saying the month together different ways. Can you say the month like a mouse in a whisper voice?

 **STUDENTS DO:** Whisper the name of the month together.

TEACHER SAY: Can you quack the month like a duck?

 **STUDENTS DO:** Quack the name of the month together.

TEACHER SAY: Can you hiss the name like a snake?

 **STUDENTS DO:** Hiss the name of the month together.

TEACHER DO: Point to the days of the week and say each day's name one at a time. Ask students to repeat the names after each.

 **STUDENTS DO:** Repeat the names of the days of the week.

TEACHER SAY: Turn to your Shoulder Partner and tell them how many days are in a week.

 **STUDENTS DO:** Tell **Shoulder Partner** that there are 7 days in a week.

2. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). Can you repeat the date with me?

 **STUDENTS DO:** Repeat the date.

3. TEACHER DO: Prepare for movement math.

TEACHER SAY: Just like yesterday, today we are going to pause and do some movement math. I am going to ask you some more questions so we can learn more about how things can be sorted. Sorting means putting things together that share something in common. Ready? If you have a brother stand up.

 **STUDENTS DO:** Stand up (if they have a brother).

TEACHER SAY: Standing, clap twice.

 **STUDENTS DO:** Standing students clap twice.

TEACHER SAY: Standing, now sit down.

TEACHER DO: Repeat the steps with the following categories (make your own up to be most relevant to your class):

- Students who have sisters.
- Students who are only children.
- Students who have braids
- Students who do not have braids.

4. TEACHER SAY: Nice job sorting yourselves. It's interesting to see how we can group ourselves in different ways! Now, let's work on counting our school days. Today we will continue recording our days in school using the same two tools we discovered yesterday. The first is a counting stick.

TEACHER DO: Pick up counting stick to show students.

TEACHER SAY: Today is the second day we are recording. This stick represents 1 day – today. We will put it in our counting jar. Let's look at all the sticks and count.

TEACHER DO: Pick up each stick one at a time and count 1, 2.

TEACHER SAY: How many sticks do we now have in the counting jar?

 **STUDENTS DO:** Respond together: Two.

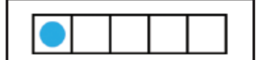
TEACHER SAY: That's right, there are 2 counting sticks in the jar. How many do you think we will have tomorrow? How do you know? Tell your Shoulder Partner.

 **STUDENTS DO:** Turn and tell their partner their ideas.

TEACHER DO: Use **Calling Sticks** to call on a student to share answers and explain their thinking.

Note for the Teacher: Although the correct answer is 3, listen and let students explain if they get a different answer. Letting students explain how they came to the wrong answer is frequently more helpful to understanding their thinking than if they get the right answer. It shows where the mistakes in their comprehension are and can help you understand how to address obstacles to their learning.

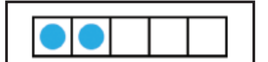
5. TEACHER SAY: We are also counting these days on a math tool called a five frame. A five frame can help us count and see numbers in our minds.



TEACHER DO: Hold up the five frame from the day before.

TEACHER SAY: Yesterday we drew 1 dot on the five frame. Help me count: 1. Today we will add 1 new dot in the next square.

 **STUDENTS DO:** Count aloud with the teacher.



TEACHER DO: Add 1 dot to the five frame.

TEACHER SAY: Now the five frame shows the number 2. Count with me.

TEACHER DO: Point to each square while counting.

 **STUDENTS DO:** Count aloud with the teacher.

TEACHER SAY: Nice counting! Now, can you make five frames that look like mine? Today you will practice making a five frame show the number two.

TEACHER DO: Hand out the five frames.

TEACHER SAY: Once you create your five frames that match mine, write the numeral 2 on the line at the end of each row.

 **STUDENTS DO:** Fill out all of the five frames to represent the number 2 and write the numeral on the line.

TEACHER DO: Walk around the room and monitor students' work. Help students who are not completing their five frames correctly.

5. TEACHER SAY: Well done making 2 on your five frame! The frame has 5 squares and only 2 have a dot in them. How many more dots would we need to make 5? Watch me count the empty boxes.

TEACHER DO: Point to each empty square, counting aloud.

 **STUDENTS DO:** Count aloud along with the teacher.

TEACHER SAY: **Nice job counting. So, my five frame tells me that 2 and 3 make 5.**

TEACHER DO: Review this by showing 2 dots and counting again the 3 empty squares.



Learn (25-30 mins)

Directions

1. TEACHER DO: Draw a 1-5 number line on the board.

TEACHER SAY: **Yesterday, we played the game Beep and we talked about what the words one more and one less mean. If I put my finger on the number 4 on the number line on the board, can someone remind us what one more than 4 is? Please raise your hand if you have an answer.**

 **STUDENTS DO:** Raise hands to respond.

TEACHER DO: Call on a student with a hand raised to answer for the class.

TEACHER SAY: **Yes, one more than 4 is 5.**

TEACHER DO: Hand out number strips and 1 counter to each student.

2. TEACHER SAY: **Today we are going to play Beep again. Just like yesterday, let's start by pointing to each number and saying its name aloud. When I point to the number 1 I say 1. Help me count all the way to 10.**

 **STUDENTS DO:** Count with the teacher from 1 to 10 while pointing on their number strips.

TEACHER SAY: **Great, today we are just going to explore the numbers 1-5. Let's count those numbers again together: 1, 2, 3, 4, 5.**

 **STUDENTS DO:** Count aloud with the teacher.

TEACHER SAY: **Great, let's start the game. Remember, I am going to cover one of the numbers from 1-5 with my counter, but it is a secret and I am not going to tell you which number it is.**

TEACHER DO: Take a counter and cover a number between 1 and 5.

TEACHER SAY: **I am going to count and when I get to the number I have covered, I will say beep instead of saying the number. Your job is to listen for the beep to figure out the missing number.**

TEACHER DO: Say the numbers on your number line. When you get to the number covered by the marker say beep, then finish counting through 5.

 **STUDENTS DO:** Listen to the teacher count and cover the number that is replaced with the word beep with a counter.

TEACHER SAY: **Who can raise their hand and tell me which number I replaced with the word beep?**

TEACHER DO: Use **Calling Sticks** to choose a student to tell you the number you covered on your number line with their counter.

TEACHER SAY: **Good work listening! The beep number was _____. Now remove your counter and put your finger on that number. Who can tell me what is one more than the number?**

Remember "one more" means the next number that comes in line.



STUDENTS DO: Remove the counters and put a finger on the number. Raise hands when they know the answer to the question.

TEACHER DO: Use **Calling Sticks** to choose a student to answer the question.

TEACHER SAY: **Great, now let's put our fingers back on _____. This time I want you to use your number strip and figure out what is one less than the beep number. When you know, share your answer with your Shoulder Partner.**



STUDENTS DO: Use their number lines to figure out the answer and share it with their **Shoulder Partners**.

TEACHER DO: Use **Calling Sticks** to choose a student to tell you what one less than the number is. Repeat Beep game with 3 more numbers following the above steps. Hand out math journals. Prepare to write on the board.

TEACHER SAY: **Please turn to the next page in your math journal. Yesterday, we practiced writing the numbers 1 and 2. Today, let's practice writing the numbers 3 and 4. Watch as I write the number 3 on the board.**

TEACHER DO: Write the number 3 on the board, explaining the steps aloud.

TEACHER SAY: Now you write the number 3 five times in your journals.



STUDENTS DO: Write the number 3 five times in their math journals.

TEACHER SAY: **Let's review the number 4. Watch me write it on the board.**

TEACHER DO: Write the number 4 on the board, explaining the steps aloud.

TEACHER SAY: Now you write the number 4 five times in your journals.



STUDENTS DO: Write the number 4 five times in their math journals.

4. TEACHER SAY: **You are mastering how to write the numbers 3 and 4. Take a moment to look at your work. Find the number you think you drew the best, and circle it. Then hold your journal up so everyone can see it.**



STUDENTS DO: Circle the best-written number and hold up the math journal.

TEACHER SAY: **I am going to tell you another math story. Listen to the story and draw a picture to go along with it. This morning when I walked into school, I saw 2 students sitting in a classroom. Can you draw those 2 faces in your math journal? Remember we draw quick pictures in math class. Draw a circle for the head, 2 circles for the eyes, and a smile!**



STUDENTS DO: Draw 2 faces in their math journals.

TEACHER DO: Walk around and make sure everyone has drawn 2 faces.

TEACHER SAY: **Then 1 more student joined them. Can you draw the student who joined them?**



STUDENTS DO: Draw 1 more face in their math journals.

TEACHER DO: Walk around and make sure everyone has added 1 more face.

TEACHER SAY: **How many students were in the class all together? How do you know? Raise your hand if you would like to answer.**



STUDENTS DO: Count the students in the drawing and raise a hand when they know the answer.

TEACHER DO: Call on a student with a hand raised to tell you their answer and explain how they got the answer. Using the example on the board, show students how to double check their work by recounting the faces.



Share (5-10 mins)

Directions

1. **TEACHER SAY: Today our math story was about students. When might a teacher need to count students? Why is counting important? Talk to your Shoulder Partner about your ideas.**



STUDENTS DO: Talk to their shoulder partners about when teachers might need to count their students and why counting is important.

TEACHER SAY: Raise your hand if you would like to share your thinking with your colleagues.



STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Call on 2-3 students to share their ideas. Ask questions as needed to help students clarify their thinking.



STUDENTS DO: Selected students share their ideas.

Lesson 33 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count from 1 to 10
- Identify the number of objects in familiar groupings
- Demonstrate understanding of the relationship between number and quantity up to 5

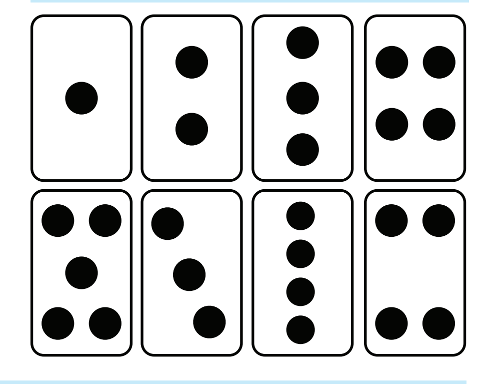
STUDENT VOCABULARY:

- Five frame
- Strategy
- Third

1	2	3	4	5

LESSON PREPARATION FOR THE TEACHER

- Create or print out five frame worksheets (one per student)
- Create or print out Flip and Record sheets (one per student).
- Create or print out Flip and Record cards 1-5 (one set per student).

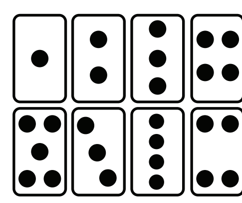


MATERIALS

Calendar Math Area



Flip and record cards

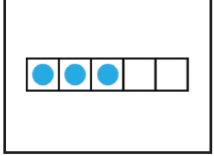


Clear counting jar



Flip and record recording sheet

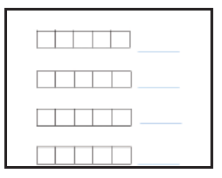
Five Frame
(from previous lesson)



Math journal and pencil



Five Frame worksheets
(one per student)



Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band



Calendar (15-20 mins)

Directions

1. TEACHER SAY: Let's look at our Calendar together!

TEACHER DO: Point to the top of the calendar

TEACHER SAY: Please turn to your Shoulder Partner and say what month we are in.

 **STUDENTS DO:** Turn and talk to their partners.

TEACHER SAY: Let's practice saying the month together different ways. Can you whisper the name of the month?

 **STUDENTS DO:** Whisper the name of the month together.

TEACHER SAY: Can you say the name of the month in a regular class voice?

 **STUDENTS DO:** Say the name of the month together.

TEACHER SAY: Can you shout the name of the month?

 **STUDENTS DO:** Shout the name of the month together.

TEACHER DO: Point to the days of the week and say each day's name one at a time. Ask students to repeat the names after each.

 **STUDENTS DO:** Repeat the names of the days of the week.

TEACHER SAY: Turn to your Shoulder Partner and tell them how many days are in a week.

 **STUDENTS DO:** Tell a **Shoulder Partner** that there are 7 days in a week.

2. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). Can you repeat the date with me?

 **STUDENTS DO:** Repeat the date.

3. TEACHER DO: Prepare for movement math.

TEACHER SAY: Just like yesterday, today we are pause to do some movement math. We're going to do some more sorting! Who can remind us what sorting means?

TEACHER DO: Use **Calling Sticks** to choose a student to share their answer.

TEACHER SAY: Yes, sorting means putting things together that share something in common. Ready? Let's start. If you like oranges, stand up.

 **STUDENTS DO:** Stand up (if they like oranges).

TEACHER SAY: Standing, clap twice.

 **STUDENTS DO:** Standing students clap twice.

TEACHER SAY: Standing, now sit down.

TEACHER DO: Repeat the steps with the following categories (make your own up to be most relevant to your class):

- Students who don't like oranges.
- Students who like lamb.
- Students who don't like lamb.
- Students who like figs.
- Students who don't like figs.

4. **TEACHER SAY:** **Nice job sorting yourselves! Now, let's continue recording our days in school using our new math tools. The first is a counting stick.**

TEACHER DO: Pick up counting stick to show students.

TEACHER SAY: **Today is the third day we are recording. This stick represents another 1. We will put it in our counting jar. Let's look at them and count.**

TEACHER DO: Pick up each stick and count 1, 2, 3.

TEACHER SAY: **How many sticks do we now have in the counting jar?**

 **STUDENTS DO:** Respond together: Three.

TEACHER SAY: **That's right, there are 3 counting sticks in the jar. How many do you think we will have tomorrow? Tell your Shoulder Partner.**

 **STUDENTS DO:** Turn and tell a partner their idea.

TEACHER SAY: **Who can raise their hand and share your thinking?**

 **STUDENTS DO:** Raise hands and explain why they think their answer is correct.

TEACHER DO: Although the correct answer is 4, listen and let students explain if they get a different answer.

5. **TEACHER SAY:** **We are also counting these days on a math tool called a five frame. A five frame can help us count and see numbers in our minds.**



TEACHER DO: Hold up the five frame from the day before.

TEACHER SAY: **Yesterday we drew 2 dots on the five frame, which was 1 more than the first day. Help me count the dots we have: 1, 2.**

 **STUDENTS DO:** Count along with the teacher.

TEACHER SAY: **Today we will add 1 more dot in the next square.**



TEACHER DO: Add 1 more dot to the five frame.

TEACHER SAY: **Now the five frame shows the number 3. Count with me.**

TEACHER DO: Point to each square while counting.

 **STUDENTS DO:** Count along with the teacher.

TEACHER SAY: **Nice counting! Now you're going to make your five frames look like mine.**

TEACHER DO: Hand out the five frames.

TEACHER SAY: **Make your five frames show the number 3. Then, write the numeral 3 on the line at the end.**

 **STUDENTS DO:** Fill out all of the five frames to represent the number 3 and write the numeral on the line.

TEACHER DO: Walk around the room and check students' work, offering tips and suggestions.

TEACHER SAY: Well done making 3 on your five frame. The frame has 5 squares and only 3 have a dot in them. How many more dots would we need to make 5? How can we figure it out?

 **STUDENTS DO:** Raise hands to answer the question. Selected students share their ideas.

TEACHER SAY: We have 3 dots on our five frame. There are 5 squares all together. We have to count the empty squares to figure out how many more dots we need to make 5. Help me count.

 **STUDENTS DO:** Count the empty squares with the teacher.

TEACHER SAY: Nice job counting. So, my five frame tells me that 3 and 2 make 5.

TEACHER DO: Review by showing 3 dots and counting again the 2 empty squares.



Learn (25-30 mins)

Directions

1. TEACHER DO: Draw a 1-5 number line on the board.

TEACHER SAY: Yesterday, we played the game Beep and we talked about what the words one more and one less mean. If I put my finger on the number 3 on the number line on the board, can someone remind us what one less than 3 is?

TEACHER DO: Use **Calling Sticks** to choose a student to answer for the class.

Note for the Teacher: On later days, this game will be played by students in pairs. Today, introduce the game as a whole class activity. If photocopies cannot be made for students on future days, continue to play as a whole class, allowing students to come to the front to "flip" numbers. If you cannot make dot cards, draw the dots on the board (remember to use different patterns for the same number) for the students to see. The students can then record numbers in the journals.

2. TEACHER SAY: Today we are going to play a new game called Flip and Record.

TEACHER DO: Either hold up the recording sheet or draw a large one on the board so all students can see it. If drawing, give students time to copy the sheet in their math journals.

TEACHER SAY: This is our Flip and Record recording sheet. On the bottom it has the numbers 1, 2, 3, 4, 5. Let's count them across together.

 **STUDENTS DO:** Count the numbers with the teacher.

TEACHER SAY: I also have a stack of cards. Each card has a group of dots on them. Watch as I turn over one of the cards and count the dots on the card.

TEACHER DO: Count the dots on the card aloud.

TEACHER SAY: I counted ____ dots on my card. Next, I will find that number on my recording sheet. I can look for the number on the bottom or count over the same number starting at the one.

TEACHER DO: Model how to find the number on the recording sheet.

 **STUDENTS DO:** Watch as the teacher models game play.

TEACHER SAY: When I find my number, I copy that number into the first box above.

TEACHER DO: Write the numeral in the first empty box above the number. For example, if the card has 3 dots on it, I count to 3, find the 3 on the bottom line, and write a 3 in the first box above the 3.

TEACHER SAY: I take the card and put it face down in a separate pile. Then, I flip a new card and do the same thing. When I run out of cards, I will turn this pile over and use them again.

TEACHER DO: Flip over a new card and count the dots on the card aloud.

TEACHER SAY: I counted ____ dots on my card. Now I will find that number on my recording sheet and write the same number in the box above it.

TEACHER DO: Write the numeral in the box above.

TEACHER SAY: Then I put the card I just used face down in the other pile. If I count the same number of dots as another round, I write the number in the next box up from the first one I wrote. When one of my columns (the boxes that go up) is filled, the game is over! Does anyone have any questions?

 **STUDENTS DO:** Raise hands to ask questions, if needed.

TEACHER DO: Hand each student a recording sheet. Start a new game with students, flipping cards over for students to count together, then recording the number on your recording sheet. Continue narrating how to play as students learn to play along and record each number. If you run out of cards, shuffle the discard pile and go through it again.

 **STUDENTS DO:** Play the game with the teacher. Count dots and record on the recording sheet as modeled by the teacher.

TEACHER DO: Periodically, check in with one or more students to make sure that everyone has the same number of numerals in a given column.



Share (5-10 mins)

Directions

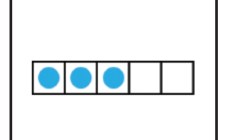
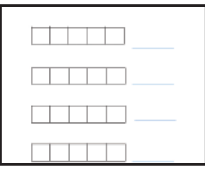
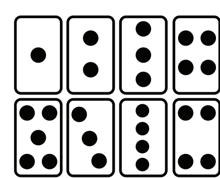
1. TEACHER SAY: Let's see what you all learned today. Did anyone use a strategy to figure out where to record their numbers? A strategy is a plan you make to help you do something. How did you figure out where to write your numbers? Turn to your Shoulder Partner to tell them how you figured out where to write your numbers.

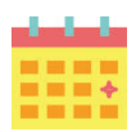
 **STUDENTS DO:** Share ideas with their shoulder partners. Raise hands and share answers with all colleagues. Possible answers include: I counted the dots from one and then counted the numbers across the bottom starting at one until I had the same number, I recognized the dot pattern.

Lesson 34 Overview

OUTCOMES	STUDENT VOCABULARY:	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Write numerals 1-5 • Identify the number of objects in familiar groupings • Demonstrate understanding of the relationship between number and quantity up to 5	• Five frame • Fourth	• Create or print out Flip and Record recording sheets (one per student). • Create or print out five frame worksheets (one per student).

MATERIALS

Calendar Math Area		Clear counting jar	
Five Frame (from previous lesson)		Five Frame worksheets (one per student)	
Flip and record recording sheet		Flip and record cards	
Math journal and pencil		Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band	



Calendar (15-20 mins)

Directions

1. TEACHER SAY: Let's start our Math time as we do every day – by looking at our Calendar.

TEACHER DO: Point to the top of the calendar

TEACHER SAY: Turn to your Shoulder Partner and say what month we are in.

 **STUDENTS DO:** Turn and talk to their partners.

TEACHER SAY: Let's practice saying the month together different ways. Can you say the name of the month in a really deep voice? [demonstrate as you say the words "deep voice"].

STUDENTS DO: Say the name of the month in a deep voice together.

TEACHER SAY: Can you say the name of the month in a high, squeaky voice?

 **STUDENTS DO:** Squeak the name of the month together.

TEACHER DO: Point to the days of the week and say each day's name one at a time.

TEACHER SAY: Today, can you join me in saying the names of the days instead of repeating after me? Let's try.

 **STUDENTS DO:** Say the names of days of the week with the teacher.

TEACHER SAY: Turn to your Shoulder Partner and tell them how many days are in a week.

 **STUDENTS DO:** Tell a **Shoulder Partner** that there are 7 days in a week.

2. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). Can you repeat the date with me?

 **STUDENTS DO:** Repeat the date.

3. TEACHER DO: Prepare for movement math.

TEACHER SAY: Today we are going to practice counting from 1 to 10. Each time I say a number, I will be touching a different part of my body and you will too. The pattern goes: knees, waist, shoulders, head, clap. When I touch my knees I say the number 1, when I touch my waist I say the number 2, when I touch my shoulders I say the number 3, when I touch my head I say the number 4, and I clap on the number 5. Then, I will do the pattern again as I count from 6 to 10.

TEACHER DO: Model this several times for the class.

 **STUDENTS DO:** Watch the teacher to learn the movement pattern.

TEACHER SAY: Please join me when you know the pattern.

 **STUDENTS DO:** Join in performing the pattern of movements and counting.

4. TEACHER SAY: After movement math, we count our days. Today we will continue recording our days in school using our new tools. The first is a counting stick.

TEACHER DO: Pick up counting stick to show students.

TEACHER SAY: Today is the fourth day we are recording. This stick represents another 1. We will put it in our counting jar. Let's look at them and count together.

TEACHER DO: Pick up each stick and count them aloud.

TEACHER SAY: How many sticks do we now have in the counting jar?

 **STUDENTS DO:** Respond together: 4.

TEACHER SAY: That's right, there are ____ counting sticks in the jar. How many do you think we will have tomorrow? How do you know? Tell your Shoulder Partner.

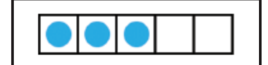
 **STUDENTS DO:** Turn and tell their partner their answer and explain how they know.

TEACHER SAY: Who can raise a hand and share your thinking?

 **STUDENTS DO:** Raise hands and explain why they think their answer is correct.

3. TEACHER SAY: Who can remember what the second tool we use is called?

 **STUDENTS DO:** Raise hands to answer the question.

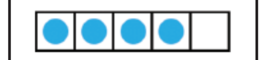


TEACHER DO: Hold up the five frame from the day before, and call on a student with a raised hand to answer.

TEACHER SAY: That's right, it's called a five frame, and it helps us see numbers. Yesterday we drew 1 new dot on the five frame. Help me count the dots we have.

 **STUDENTS DO:** Count aloud with the teacher.

TEACHER SAY: Today we will add 1 more dot in the next square.



TEACHER DO: Add 1 dot to the five frame.

TEACHER SAY: Count the dots with me again.

 **STUDENTS DO:** Count aloud with the teacher.

TEACHER SAY: We have 4 dots now!

TEACHER DO: Hand out five frame worksheets to students.

TEACHER SAY: Can you make your frames look like mine? Draw 4 dots on each five frame. Then write the numeral 4 on the line at the end of each frame.

 **STUDENTS DO:** Fill out all of the five frames to represent the number 4. Write 4 on the lines.

TEACHER DO: Walk around the room and check on student progress and understanding.

4. TEACHER SAY: Well done making 4 on your five frame! The frame has 5 squares and only 4 have a dot in them. How many more dots would we need to make 5? Raise your hand if you think you know.

 **STUDENTS DO:** Raise hands to answer the questions. Selected student should point out that they need to count the empty square.

TEACHER SAY: We need to count the empty square to find out how many more dots we need to make 5. How many do we need?

 **STUDENTS DO:** Respond together: 1.

TEACHER SAY: Nice job counting. So, our five frame tells us that 4 and 1 make 5.

TEACHER DO: Review this by showing 4 dots and counting again the 1 empty square.



Learn (25-30 mins)

Directions

1. TEACHER SAY: Let's play a quick counting game. We'll play Jump Up. We will squat down and count from 1 to 10. When we get to 10, we will all jump up and shout 10! Get ready – stand up and squat down.

 **STUDENTS DO:** Stand up and squat down. Count to 10 with the teacher, jumping up and shouting when they get to 10.

TEACHER SAY: Great counting!

2. TEACHER DO: Hand out math journals and ask students to open to the next blank page.

STUDENTS DO: Open math journals to the next blank page.

TEACHER SAY: Let's practice writing some of numbers. Stand and Sky Write numbers 1 through 5 with me.

TEACHER DO: Stand and sky write numbers 1 through 5. Review how to write each number.

 **STUDENTS DO:** Stand and sky write numbers 1 through 5 with the teacher.

TEACHER SAY: Now write numbers 1, 2, 3, 4, and 5 in your math journals. I'll walk around and help you if you need help. You can also ask your Shoulder Partner for help if you need it.

 **STUDENTS DO:** Write numbers 1-5 in their math journals.

TEACHER DO: Walk around the classroom to monitor students' work and offer help, as needed.

TEACHER SAY: I saw a lot of great number writing as I walked around! Next time, we will practice 6, 7, 8, 9, and 10.

3. TEACHER SAY: Yesterday, we played the game Flip and Record. Can someone tell me how they knew how many dots were on the card? Did they have a strategy that they used to make sure they only counted each dot one time? Did anyone use a strategy that didn't involve counting?

TEACHER DO: Call on several students to share.

TEACHER SAY: Today we are going to play Flip and Record again. Let's review how to play.

TEACHER DO: Briefly review how to play the game, as needed.

TEACHER SAY: Does anyone have any questions about how to play the game?

 **STUDENTS DO:** Raise hands if they have questions about how to play the game.

TEACHER DO: Respond to questions while handing each student a recording sheet and a pre-cut section of cards.

 **STUDENTS DO:** Play the game with the teacher.

TEACHER DO: As you play, move around the room to help students, as needed.



Share (5-10 mins)

Directions

1. TEACHER SAY: Let's see what you all learned today. Besides math class, when do we need to know how to write numbers? Why is it important that we learn how to write our numbers? Turn and talk to your Shoulder Partner about your thinking.

 **STUDENTS DO:** Turn and talk to their shoulder partners about their thinking.

TEACHER SAY: Raise your hands if you would like to share your thinking with your colleagues.

 **STUDENTS DO:** Raise hands. Selected students share their thinking with their colleagues.

Lesson 35 Overview

OUTCOMES

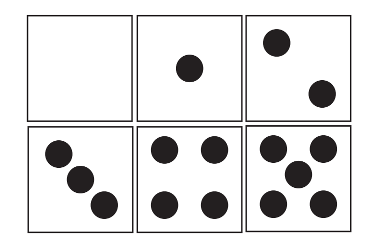
Students will:
- Participate in Calendar Math activities
- Count from 1 to 10
- Write numerals 6-10
- Demonstrate understanding of the relationship between number and quantity up to 5
- Apply strategies to determine whether two parts make a given whole (5)

STUDENT VOCABULARY:

- Fifth
- Five frame
- Strategy

LESSON PREPARATION FOR THE TEACHER

- Create or print out sets of Making 5 Memory game cards (one set per pair of students). Cut cards apart and have them ready to hand out to pairs of students for game play.



MATERIALS

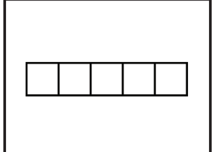
Calendar Math Area



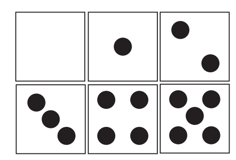
Clear counting jar



Five Frame (from previous lesson)



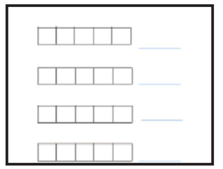
Making 5 Memory Game cards (one set per pair)



Math journal and pencil



Five Frame worksheets (one per student)



Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band





Calendar (15-20 mins)

Directions

1. **TEACHER SAY:** **Join me for Calendar Math! Soon, I will be asking one of you to help us do Calendar Math each day. Make sure you are paying attention so you will know what to do if I ask you to be the leader!**

TEACHER DO: Point to the top of the calendar

TEACHER SAY: **Turn to your Shoulder Partner and say what month we are in.**



STUDENTS DO: Turn and talk to their partners.

TEACHER SAY: **What month are we in? Raise your hand if you know.**



STUDENTS DO: Raise their hands to respond. Selected student says the current month.

TEACHER SAY: **Everyone say the month together.**



STUDENTS DO: Say the month together.

TEACHER SAY: **Say the names of the days of the week with me as I point to them.**

TEACHER DO: Point to the days of the week and say each day's name one at a time.



STUDENTS DO: Say the names of days of the week with the teacher.

TEACHER SAY: **How many days are in a week? Can we say it all at once?**



STUDENTS DO: Respond together: 7.

2. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: **Today is (day) the (number date) of (month) (year). Can you repeat the date with me?**

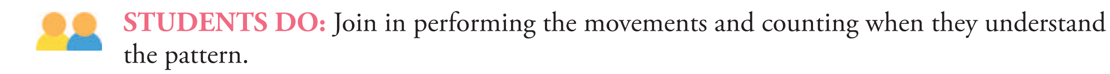


STUDENTS DO: Repeat the date together.

3. TEACHER DO: Prepare for movement math.

TEACHER SAY: **Let's practice counting from 1 to 10 using the same pattern we used yesterday. It's a lot to remember! The pattern goes: knees, waist, shoulders, head, clap. When I touch my knees I say the number 1, when I touch my waist I say the number 2, when I touch my shoulders I say the number 3, when I touch my head I say the number 4, and I clap on the number 5. Then I repeat the pattern to count from 6 to 10. Watch me and join in when you are ready.**

TEACHER DO: Model the counting and movement pattern.



STUDENTS DO: Join in performing the movements and counting when they understand the pattern.

4. TEACHER SAY: **Let's count our days. We have been using a math tool called a counting stick.**

TEACHER DO: Pick up a counting stick to show students.

TEACHER SAY: **Today is the fifth day we are recording. This stick represents another 1. We will put it in our counting jar. Let's look at them and count together.**

TEACHER DO: Pick up each stick and count them aloud.



STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: How many sticks do we now have in the counting jar now?

 **STUDENTS DO:** Respond together: 5.

TEACHER SAY: That's right, there are 5 counting sticks in the jar. How many do you think we will have tomorrow? How do you know? Tell your Shoulder Partner.

 **STUDENTS DO:** Turn and tell their partner their answer and explain how they know.

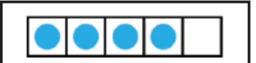
TEACHER SAY: Who can raise a hand and share your thinking?

 **STUDENTS DO:** Raise hands and explain why they think their answer is correct.

TEACHER DO: Listen and let students explain if they get a different answer.

TEACHER SAY: Who can remember what the second tool we use is called?

 **STUDENTS DO:** Raise hands to respond. Selected student answers: five frame.

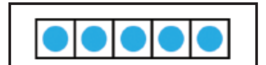


TEACHER DO: Hold up the five frame from the day before.

TEACHER SAY: Yesterday we drew 1 new dot on our five frame. Help me count the dots we have.

 **STUDENTS DO:** Count aloud with the teacher.

TEACHER SAY: Today, we will add a new dot in the next square.



TEACHER DO: Add the 5^{th} dot to the five frame.

TEACHER SAY: Count the dots with me.

 **STUDENTS DO:** Count aloud with teacher.

TEACHER SAY: Nice counting! We have been practicing adding dots to five frames. Today you will fill your five frames!

TEACHER DO: Hand out the five frames.

TEACHER SAY: Draw 5 dots on each five frame to show how many 5 is. You're your five frames look like mine. Remember to write the numeral 5 on the line at the end of each frame.

 **STUDENTS DO:** Fill out all of the five frames to represent the number 5 and write the numeral on the line.

TEACHER DO: Walk around the room and check for student progress and understanding. Help students as needed.

TEACHER SAY: Well done making 5 on your five frame. How many more dots would we need to make 5?

 **STUDENTS DO:** Respond together: 0.

TEACHER SAY: Zero! Our five frame is complete. This tells me that 5 and 0 makes 5. Every day, we added 1 dot to our five frame and figured out how many more dots we would need to make 5. Today, we learned that 5 and 0 make 5. I can write that like this.

TEACHER DO: Write 5 and 0 make 5 on the board.

TEACHER SAY: I'm going to read this. Then you repeat it after me.

TEACHER DO: Read aloud and point to each word.

STUDENTS DO: Repeat after the teacher.

TEACHER SAY: **Do you remember any other combinations we saw that equal 5?**

STUDENTS DO: Raise hands to offer answers if they remember.

TEACHER DO: If students identify valid combinations, write them on the board and have students read the number sentence with you. If students are unable to remember combinations, cover the dots with your hands and model how to count and how many more dots are needed. Each time, record the numbers on the board until the board says the following:

- 0 and 5 make 5
- 1 and 4 make 5
- 2 and 3 make 5
- 3 and 2 make 5
- 4 and 1 make 5
- 5 and 0 make 5

TEACHER SAY: **I will read each one aloud. Repeat after me.**

STUDENTS DO: Repeat each sentence after the teacher.

TEACHER DO: Leave the math sentences on the board.



Learn (25-30 mins)

Directions

1. TEACHER SAY: **Let's play Jump Up again. Remember, we will down and count from 1 to 10. When we get to 10, we will all jump up and shout 10! Get ready!**



STUDENTS DO: Stand up and squat down. Count to 10 with the teacher, jumping up and shouting when they get to 10.

TEACHER SAY: **Wonderful!**

2. TEACHER DO: Hand out math journals and ask students to open to the next blank page.



STUDENTS DO: Open math journals to the next blank page.

TEACHER SAY: **Yesterday, we practiced writing numbers 1 through 5. Today, we will practice writing numbers 6 through 10. Stand and Sky Write numbers 6 through 10 with me.**

TEACHER DO: Stand and sky write numbers 6 through 10. Review how to write each number.



STUDENTS DO: Stand and sky write numbers 6 through 10 with the teacher.

TEACHER SAY: **Now write numbers 6, 7, 8, 9, and 10 in your math journals. I'll walk around and help you if you need help. You can also ask your Shoulder Partner for help if you need it.**



STUDENTS DO: Write numbers 6-10 in their math journals.

TEACHER DO: Walk around the classroom to monitor students' work and offer help, as needed.

TEACHER SAY: **I saw a lot of great number writing as I walked around. You are getting so good at writing numbers 1 through 10! I think you might be ready for some harder numbers soon!**

3. TEACHER DO: Collect math journals.

TEACHER SAY: **Today, we are going to play a new counting game. This game will help us get even better at counting and recognizing how many are in a set. Today's game is called Making 5 Memory.**

TEACHER DO: Hold up the Making 5 Memory game cards.

TEACHER SAY: You will play with a partner. You and your partner will receive twelve cards. All of the cards have dots on them. I'm going to show you how to play. First I mix up the cards.

TEACHER DO: Model how to shuffle the cards.

TEACHER SAY: Then, I lay them face down in a row of 4 cards.

TEACHER DO: Model how to lay the cards face down in a row of 4.

TEACHER SAY: After I have a row of 4, I put another row of cards under the first row. Then I put a row of cards under that row.

TEACHER DO: Model how to arrange the 12 cards in a 4 by 3 array.

TEACHER SAY: I'm going to ask a volunteer to play with me so I can show everyone how to play. Raise your hands if you would like to help me.



STUDENTS DO: Raise hands to volunteer. Selected student helps the teacher play the game.

TEACHER SAY: I'm going to let my partner go first, so ______ is Player 1. It does not matter who goes first. We will each have a turn. Player 1 turns over 2 cards. After you turn them over, please hold them up to show your classmates.



STUDENTS DO: Play 1 turns over 2 cards and holds them up for the class to see.

TEACHER DO: Depending on what cards the student has turned over, use them to help students determine whether or not they can be put together to make 5. For example: "Player 1 turned over a card with 2 dots and a card with the 0 dots. How can we find out if 2 and 0 make 5?"



STUDENTS DO: Raise hands to answer the question. Selected students will offer suggestions. Possible answers may include: count the dots, add 2 and 0, use fingers, look at the number sentences they read aloud with you during the five frame activity.

TEACHER SAY: If the dots on the two cards make 5 when Player 1 adds them together, Player 1 keeps the cards. If they don't, Player 1 turns them back over in the exact same place and it is the Player 2's turn. It is important to pay attention so you know where the cards are! You might need one your partner has turned over! Do _____'s cards make 5? What should _____ do with the cards?



STUDENTS DO: Call out the answers. Player 1 keeps or returns the cards accordingly.

TEACHER SAY: Now it's my turn. I'm going to turn over two cards.

TEACHER DO: Hold up the two cards turned over.

TEACHER SAY: I have one card with ___ dots and another cards with ___ dots. Do those two numbers make 5? Raise your hand if you think you know.



STUDENTS DO: Raise hands to respond. Selected student answers the question.

TEACHER DO: Confirm or correct the student's answer.

TEACHER SAY: Did I get to 5?

TEACHER DO: If you did, keep the cards. If you did not turn them back over.

TEACHER SAY: When you play with your partner, you do not have to hold up the cards. Just turn them over in place. You will play the game until all of the cards are gone.

TEACHER DO: Hand out game materials to each pair of students.


STUDENTS DO: Play the game with their partners.

TEACHER DO: Walk around the room and see if students need help. Take note of different strategies students use, students who can play the game without counting, and students who may need additional instruction. At the end of the Learn segment, collect all materials for future use.



Share (5-10 mins)

Directions

1. **TEACHER SAY:** **What strategies did you use to figure out if your two cards made 5?**

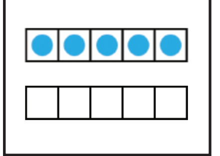
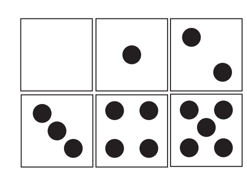

STUDENTS DO: Raise hands and discuss their strategies with their colleagues.

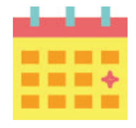
TEACHER DO: Take note of misconceptions and think about how to address them in future lessons.

Lesson 36 Overview

OUTCOMES	STUDENT VOCABULARY:	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Demonstrate understanding of the relationship between number and quantity up to 5 • Identify the number of objects in familiar groupings • Apply strategies to determine whether two parts make a given whole (5)	• Count on • Five frame • Sixth	• Create or print out a new five frame.

MATERIALS

Calendar Math Area		Clear counting jar	
Two Five Frames (one from previous lesson, one blank)		Making 5 Memory Game cards (one set per pair)	
Math journal and pencil		Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band	



Calendar (15-20 mins)

Directions

1. TEACHER SAY: Let's start Calendar Math. Remember, soon I will be asking one of you to help me lead Calendar Math each day. Make sure you will know what to do!

TEACHER SAY: Turn to your Shoulder Partner and say what month we are in.

 **STUDENTS DO:** Turn and talk to their partners.

TEACHER SAY: What month are we in? Raise your hand if you know.

 **STUDENTS DO:** Raise their hands to respond. Selected student says the current month.

TEACHER SAY: Everyone say the month together.

 **STUDENTS DO:** Say the month together.

TEACHER SAY: Say the names of the days of the week with me as I point to them.

TEACHER DO: Point to the days of the week and say each day's name one at a time.

 **STUDENTS DO:** Say the names of days of the week with the teacher.

TEACHER SAY: How many days are in a week? Can we say it all at once?

 **STUDENTS DO:** Respond together: 7.

2. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). Can you repeat the date with me?

 **STUDENTS DO:** Repeat the date together.

3. TEACHER DO: Prepare for movement math.

TEACHER SAY: Today we are going to practice counting from 1 to 5. Each time I say a number, I will be touching a different part of my body and you will too. The pattern goes: toes, knees, waist, shoulders, head. When I touch my toes I say the number 1, when I touch my knees I say the number 2, when I touch my waist I say the number 3, when I touch my shoulders I say the number 4, and when I touch my head I say the number 5.

TEACHER DO: Model the counting and movement pattern.

 **STUDENTS DO:** Join in performing the movements and counting when they understand the pattern.

4. TEACHER SAY: After movement math, we count our days. Today we will continue recording our days in school using our math tools. The first math tool is a counting stick.

TEACHER DO: Pick up counting stick to show students.

TEACHER SAY: Today is the sixth day we are recording. This stick represents another 1. We will put it in our counting jar. Let's look at them and count together.

TEACHER DO: Pick up each stick and count them aloud.

TEACHER SAY: How many sticks do we now have in the counting jar?

 **STUDENTS DO:** Respond together: 6.

TEACHER SAY: That's right, there are 6 counting sticks in the jar. How many do you think we will have tomorrow? How do you know? Tell your Shoulder Partner.

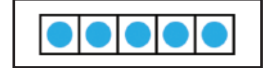
 **STUDENTS DO:** Turn and tell their partner their answer and explain how they know.

TEACHER SAY: Who can raise a hand and share your thinking?

 **STUDENTS DO:** Raise hands and explain why they think their answer is correct.

TEACHER DO: Listen and let students explain if they get a different answer.

5. TEACHER SAY: Who can remember what the second math tool we use is called?



TEACHER DO: Hold up the five frame from the day before, and call on a student with a raised hand to answer.

TEACHER SAY: That's right, it's called a five frame. Yesterday, we counted to 5 on our five frame. Can anyone tell me why this math tool is called a five frame?

 **STUDENTS DO:** Raise hands. Selected students should note there are 5 boxes. When filled it shows 5.

TEACHER SAY: **Yesterday we filled up our first five frame by counting to 5 days. Count the dots with me.**

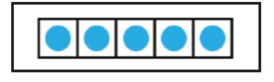
 **STUDENTS DO:** Count aloud with the teacher.

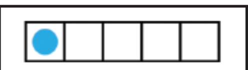
TEACHER SAY: **Today is our sixth day, so we need to count 1 more to 6. Can I fit another dot on this five frame? What should I do?**

 **STUDENTS DO:** Call out the answer: We need a new five frame.

TEACHER SAY: **We need a new five frame!**

TEACHER DO: Display blank five frame.





TEACHER SAY: **Now we will add another five frame underneath it and put one dot on it. We now have 5 and 1 more – 6. Count the dots with me.**

STUDENTS DO: Count dots on full five frame and 1 more to get 6.

TEACHER SAY: **The five frame is a great tool because it helps us take a counting shortcut. Let me show you how it works.**

TEACHER DO: Point to the full five frame.

TEACHER SAY: **Answer me quickly without counting: How many dots are on this five frame?**

 **STUDENTS DO:** Call out together: 5.

TEACHER SAY: **How did you know that without counting?**

TEACHER DO: Use Counting Sticks to call on a student to answer the question.

 **STUDENTS DO:** Select student answers.

TEACHER SAY: **We know that a five frame holds 5 dots. If it's full, there are 5 dots. We don't even have to count them! Then we can take a counting shortcut. Watch me. I can start my counting at 5 by putting 5 in my hand.**

TEACHER DO: Hold your hand over the full five frame. Say the number 5 and pretend to grab it in your hand.

TEACHER SAY: **Now that I already have 5 in my hand, I can count on to 6. When we count on, we start with a big number like 5 – without counting up to 5 – and then keep counting on. So we would say five… six. Who would like to try it?**

 **STUDENTS DO:** Raise hands to try the counting shortcut.

TEACHER DO: Call on 2-3 students to practice the counting shortcut.

TEACHER SAY: **Now that you know the trick, you can use it to count when we're using our five frames.**



Learn (25-30 mins)

Directions

1. **TEACHER SAY: Let's play a counting game called Counting Colleagues. I will start by pointing to myself and counting 1. Then I point to someone. The person I point to stands and counts 2. Then that person points to a colleague who stands and counts 3. And so on. We will count up to 10 and keep counting until all of us are standing. Does anyone have any questions about how to play?**

 **STUDENTS DO:** Raise hands to ask questions about the game, if needed.

TEACHER DO: Start playing the game. Monitor game play to make sure students are standing and counting correctly. Continue until all students are standing.

2. **TEACHER SAY: Yesterday, we played the game Making 5 Memory. Who can remind us how to play? Raise your hand. I will call on a few of you.**

TEACHER DO: Call on several students to explain how to play the Making 5 Memory game.

 **STUDENTS DO:** Selected students help explain game play to colleagues.

TEACHER DO: Model each step as students describe them.

TEACHER SAY: You will play this game with your Shoulder Partner again today.

TEACHER DO: Hand out game materials. Move around the room and see if students need help. Take note of strategies students are using, which students are ready for more challenging content, and which students may need additional support.



Share (5-10 mins)

Directions

1. **TEACHER SAY: Let's see what you all learned today. Was it easier playing the game for a second time? Did anyone try a new strategy today?**

 **STUDENTS DO:** Raise hands to volunteer. Selected students share their thinking with their colleagues.

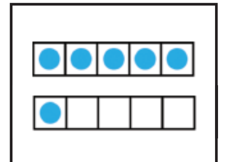
TEACHER SAY: Did anyone hear a strategy they would like to try next time they play?

TEACHER DO: Call on students with hands raised to discuss the counting/adding strategies they would like to try.

Lesson 37 Overview

OUTCOMES	STUDENT VOCABULARY:
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Sky write numbers 1-10 • Use the counting on strategy within 10 • Compose numbers to 5 using actions, drawings, and models	• Count on • Five frame • Number bond • Seventh

MATERIALS

Calendar Math Area		Clear counting jar	
Five Frames (from previous lesson)		Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band	



Calendar (15-20 mins)

Directions

1. TEACHER SAY: Join me for Calendar Math.

TEACHER DO: Point to the top of the calendar.

TEACHER SAY: Turn to your Shoulder Partner and say what month we are in.

 **STUDENTS DO:** Turn and talk to their partners.

TEACHER SAY: What month are we in? Raise your hand if you know.

 **STUDENTS DO:** Raise their hands to respond. Selected student says the current month.

TEACHER SAY: Everyone say the month together.

 **STUDENTS DO:** Say the month together.

TEACHER SAY: Say the names of the days of the week with me as I point to them.

TEACHER DO: Point to the days of the week and say each day's name one at a time.

 **STUDENTS DO:** Say the names of days of the week with the teacher.

TEACHER SAY: How many days are in a week? Can we say it all at once?

 **STUDENTS DO:** Respond together: 7.

2. TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). Can you repeat the date with me?

 **STUDENTS DO:** Repeat the date together.

3. TEACHER DO: Prepare for movement math.

TEACHER SAY: Let's try a new movement today. We're going to stand and march in place as we count to 10 together. Let's try it.

 **STUDENTS DO:** Stand and march in place as they count aloud to 10.

TEACHER SAY: Now, I'm going to make it a little harder. This time, we are still going to march in place as we count, but we're also going to raise and lower our arms as we count. Watch me.

TEACHER DO: Start with arms at your sides. Bend your elbows so your fists are at your shoulders. March in place, counting aloud to 10. At the same time, alternate raising and lowering your arms as you count. For example, raise on 1 (punch the air above your head), lower on 2 (lower fists back to shoulder-height), raise on 3, lower on 4, and so on until you get to 10.

TEACHER SAY: Now you join me.

 **STUDENTS DO:** Join in performing the movements and counting.

TEACHER DO: Repeat the movement and counting pattern 1-2 more times.

4. TEACHER SAY: Let's count our days. We will use our counting sticks. Today is the seventh day we are recording. This stick represents another 1. We will put it in our counting jar. Let's look at them and count together.

TEACHER DO: Pick up each stick and count them aloud.

TEACHER SAY: How many sticks do we now have in the counting jar?

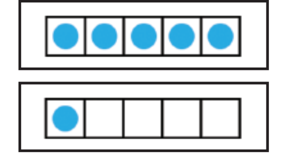
 **STUDENTS DO:** Respond with the number of sticks in the jar: 7.

TEACHER SAY: That's right, there are 7 counting sticks in the jar.

5. TEACHER SAY: Let's continue counting on our five frames. Who can remember what we did yesterday when we counted to 6?

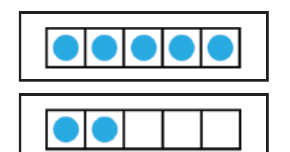
 **STUDENTS DO:** Raise hands to volunteer.

TEACHER DO: Call on a student with a raised hand to answer (added a new five frame). Students may also mention using the counting strategy counting on.



TEACHER SAY: That's right, yesterday we started our new five frame. Let's count the dots we have together.

 **STUDENTS DO:** Count the dots aloud with the teacher.



TEACHER SAY: Now we will add 1 more dot for today.

TEACHER DO: Add a dot to the five frame.

TEACHER SAY: We had 6 and now we have 1 more, or 7. Let's count all the dots together.

 **STUDENTS DO:** Count the dots aloud with the teacher.

Note for the Teacher: Counting on, or putting one number "in your hand" is an important skill for students to have. They may not all understand it yet, but the daily exposure will help them develop understanding so they can apply the strategy on their own.

TEACHER SAY: **Yesterday, we learned a great counting strategy – counting on. Since we know this five frame has 5 dots, we don't have to count 1, 2, 3, 4, 5. We can just start at 5 and count on! I can start my counting at 5 by putting 5 in my hand.**

TEACHER DO: Hold your hand over the full five frame. Say the number 5 and pretend to grab 5 in your hand.

TEACHER SAY: **Now that I already have 5 in my hand I can count on to find out how many dots we have now. I have 5… 6, 7. Try that with me. First, grab 5 in your hand, and say 5.**

 STUDENTS DO: Pretend to grab 5 in a hand and say 5.

TEACHER SAY: **Then count on from five. Count with me: 5… 6, 7.**

 STUDENTS DO: Count 5, 6, 7 aloud with teacher.



Learn (25-30 mins)

Directions

1. TEACHER SAY: **Let's Sky Write some numbers together. Stand and get ready.**

STUDENTS DO: Stand and prepare to sky write numbers with the teacher.

TEACHER SAY: **Sky Write numbers 1 through 10 with me.**

 STUDENTS DO: Sky write numbers 1 through 10 with the teacher. work on mastering our numbers.

TEACHER SAY: **Wonderful!**

2. TEACHER DO: Draw three dots on the board.

TEACHER SAY: **Yesterday, we played a game where we needed to make the number 5 using two numbers. If I have 3 dots, how many more dots do I need to make 5? Raise your hand if you can tell me.**

 STUDENTS DO: Raise hands to volunteer. Answer 2 when called on.

TEACHER SAY: **Today, we are going to work more on putting numbers together and taking them apart.**

3. TEACHER DO: Hand out math journals and ask students to open them to the next blank page.

 STUDENTS DO: Open journals to the next blank page.

TEACHER SAY: **I am going to tell you a math story. Draw pictures in your math journal to help you solve it. Asim went to the market and bought 3 oranges. His sister Chione bought 2 oranges. Draw the oranges that the children bought.**

 STUDENTS DO: Draw the picture of 3 and 2 oranges in the journal.

TEACHER DO: Walk around and check that students have the proper drawings.

TEACHER SAY: **How many oranges did they buy in all? Talk to your Shoulder Partner about how you know.**

 STUDENTS DO: Discuss their ideas with a **Shoulder Partner**.

4. TEACHER SAY: **I need 5 students to come to the front of the room. I will use Calling Sticks to choose who will help us today.**

TEACHER DO: Use **Calling Sticks** to choose 5 students. Have selected students stand in a line.

TEACHER SAY: **Let's count the group of students. We will clap our hands for each number. Please say them with me.**

TEACHER DO: Count and clap from 1 to 5.

 STUDENTS DO: Count each student and clap with each number – from one to five.

TEACHER SAY: **Nice job counting. Now I am going to put our students into two different groups.**

TEACHER DO: Spilt the 5 up so that there is one group of 3 and one group of 2.

TEACHER SAY: **Do I still have 5 students? Let's count and clap to double check.**

 STUDENTS DO: Count and clap with the teacher.

TEACHER SAY: **Yes, I still have 5. This time let's count the groups separately. Count and clap with me.**

TEACHER DO: Count and clap out the 3 students in the first group.

 STUDENTS DO: Count and clap with the teacher.

TEACHER SAY: **Our first group has 3 students. Let's clap and count the other group.**

TEACHER DO: Count and clap out the 2 students in the second group.

 STUDENTS DO: Count and clap with the teacher.

TEACHER SAY: **My first group has 3 students and my second group has 2. Let's count them all together one more time.**

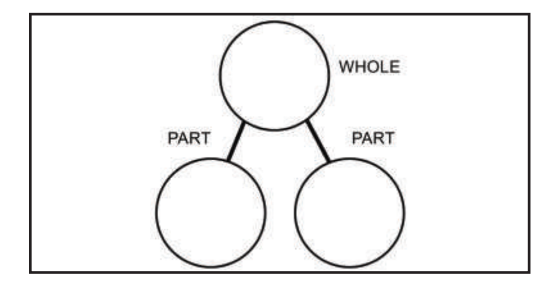
TEACHER DO: Keep students in separate groups, but count/clap all 5.

 STUDENTS DO: Count and clap with the teacher.

TEACHER SAY: **So, if we have 3 students in one group and 2 in another, when we put them together they make 5. Now look back at your journals. If you have 3 oranges in one group and 2 in another, how many oranges you have in all?**

 STUDENTS DO: Raise hands to answer. Selected student responds: 5.

5. TEACHER DO: Move to the board and draw a number bond.



TEACHER SAY: **This is called a number bond. It has two Parts.**

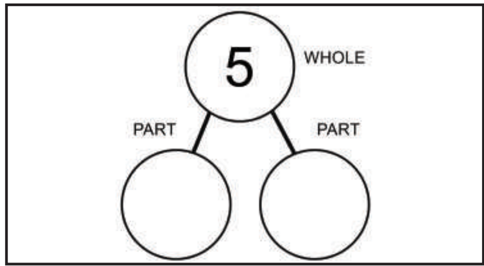
TEACHER DO: Point to the Parts of the bond.

TEACHER SAY: **And the two Parts together make one Whole.**

TEACHER DO: Point to the Whole of the bond.

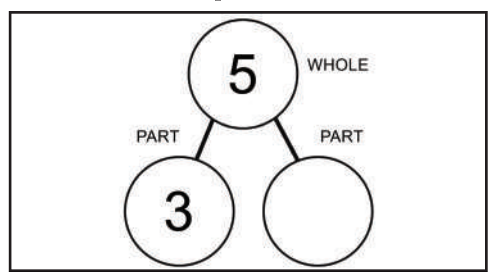
TEACHER SAY: **All of these students together makes 5. So, 5 is my whole. I show that 5 is my whole by writing 5 in the Whole circle.**

TEACHER DO: Write the number 5 in the circle that shows the whole.



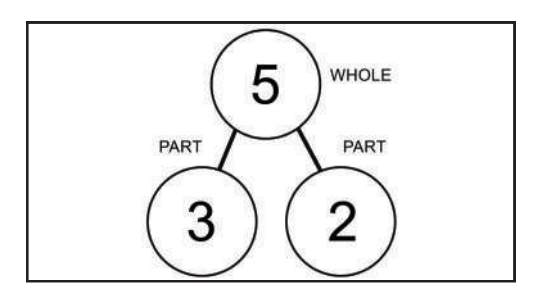
TEACHER SAY: **I can then put my two parts in the other circles. I can put a 3 in this circle.**

TEACHER DO: Draws a 3 in one of the parts.



TEACHER SAY: **I put my 2 in the other circle to show the other part.**

TEACHER DO: Draw a 2 in the other part.



TEACHER SAY: **This number bond is showing me that 3 and 2 makes 5. Copy this number bond into your journals. I will walk around and help you if you need help. Tomorrow you will learn to make one of your own, but for today just copy my number bond.**

 **STUDENTS DO:** Copy the number bond of 3 and 2 making 5 in their math journals.



Share (5-10 mins)

Directions

1. **TEACHER SAY:** **Think to yourself and then turn and tell your Shoulder Partner two numbers that can go together to make 5.**

 **STUDENTS DO:** Turn and talk to their **Shoulder Partners**.

TEACHER SAY: **Would someone like to share their answers with the class?**

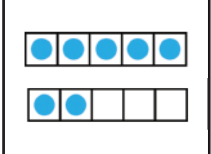
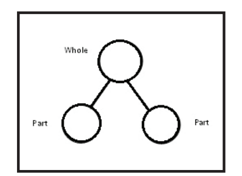
 **STUDENTS DO:** Raise hands to volunteer.

TEACHER DO: Call on 3 different students to share their thinking.

Lesson 38 Overview

OUTCOMES	STUDENT VOCABULARY:	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 10 • Use the counting on strategy within 10 • Represent composition to 5 using numeric number bonds	• Adding • Count on • Eighth • Five frame • Number bond	• Create or print our blank number bond templates. Alternatively, students may draw them in their journals, but may need practice.

MATERIALS

Calendar Math Area		Clear counting jar	
Ball		Five Frames (from previous lesson)	
Math journal and pencil		Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band	
Number Bond Template, 1 for every student.			



Calendar (15-20 mins)

Directions

1. **TEACHER SAY:** **Join me for Calendar Math. I'm going to see who will be ready to be a Calendar Math Helper next week!**

TEACHER DO: Point to the top of the calendar

TEACHER SAY: **What month are we in? All of you tell me!**

 **STUDENTS DO:** Respond together: (current month).

TEACHER DO: Point to today on the calendar.

TEACHER SAY: **Today is _______ (name of day). Repeat that whole sentence with me.**

 **STUDENTS DO:** Repeat the sentence "Today is _______."

TEACHER SAY: Say the names of the days of the week with me as I point to them.

 **STUDENTS DO:** Say the names of days of the week with the teacher.

TEACHER SAY: How many days are in a week? All of you tell me!

 **STUDENTS DO:** Respond together: 7.

TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). Can you repeat the date with me?

 **STUDENTS DO:** Repeat the date.

TEACHER SAY: Now, it's time for movement math. Let's play a new game called Catch and Count. It's like Counting Colleagues, but instead of pointing to each other, we gently toss a ball to each other, so you have to pay attention!

TEACHER DO: Begin the game by counting 1 and gently tossing the ball to a student. That student will stand and say 2 and gently toss the ball to a colleague. Count up to 10, then start again at 1. Game play continues until all students are standing.

 **STUDENTS DO:** Play the game, standing and gently tossing the ball as they count.

TEACHER DO: After all students are standing, collect the ball and have students sit down again.

2. TEACHER SAY: Let's count our days. Today is the eighth day we are recording. This counting stick represents another 1. We will put it in our counting jar. Let's look at them and count together.

TEACHER DO: Pick up each stick and count them aloud.

TEACHER SAY: How many sticks do we now have in the counting jar?

 **STUDENTS DO:** Respond with the number of sticks in the jar: 8.

TEACHER SAY: That's right, there are 8 counting sticks in the jar. How many do you think we will have tomorrow? How do you know? Raise your hand.

 **STUDENTS DO:** Raise hands to volunteer. Selected student shares the answer and explains their thinking.

3. TEACHER SAY: Today, we are going to continue counting on our five frames. Who can remember what we had to do two days ago when we counted to 6?

 **STUDENTS DO:** Raise hands to volunteer. Selected student explains that we had to add a five frame.

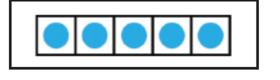


TEACHER SAY: That's right, yesterday we started our new five frame. Let's count the dots we have so far together.

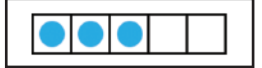
 **STUDENTS DO:** Count the dots aloud with the teacher.

TEACHER SAY: We said today is our 8th day. What do we need to do today to show 8 on our five frames?

 **STUDENTS DO:** Raise hands to answer the question. Selected student answers: add a dot.



TEACHER SAY: That's right! Let's add another dot.



TEACHER DO: Add a dot to the five frames.

TEACHER SAY: Let's count all the dots together.

 **STUDENTS DO:** Count the dots aloud with the teacher.

TEACHER SAY: We had 7 and now we have 1 more – 8. Who remembers our shortcut counting strategy – counting on? Who thinks they can explain it?

 **STUDENTS DO:** Raise hands to volunteer.

TEACHER DO: Allow selected student to explain. Offer assistance as needed. Then fully explain the strategy.

TEACHER SAY: Since we know this five frame has 5 dots, we don't have to count 1, 2, 3, 4, 5. We can just start at 5 and count on! I can start my counting at 5 by putting 5 in my hand.

TEACHER DO: Hold your hand over the full five frame. Say the number 5 and pretend to grab 5 in your hand.

TEACHER SAY: Now that I already have 5 in my hand I can count on to find out how many dots we have now. I have 5… 6, 7, 8. Try that with me. First, grab 5 in your hand, and say 5.

 **STUDENTS DO:** Pretend to grab 5 in a hand and say 5.

TEACHER SAY: Then count on from five. Count with me: 5… 6, 7, 8.

 **STUDENTS DO:** Count 5, 6, 7, 8 aloud with teacher.



Learn (25-30 mins)

Directions

1. TEACHER SAY: Yesterday we learned more about putting numbers together. We call this adding, when we put smaller numbers together to make a bigger number. Can you remember two numbers that you can put together, or add, to make 5? Tell your Shoulder Partner first and use your fingers to prove it.

 **STUDENTS DO:** Talk to partner and show two numbers that add together to make five.

TEACHER SAY: Now, using two hands can you show two numbers that make 5? For example, I could hold up 1 finger on this hand.

TEACHER DO: Hold up 1 finger on right hand.

TEACHER SAY: And I could hold up 4 fingers on this hand.

TEACHER DO: Hold up 4 fingers on left hand.

TEACHER SAY: I can check my work by counting each finger that I have up to make sure I get to 5.

TEACHER DO: Taps each finger while counting.

TEACHER SAY: Now it's your turn. If you can't think of another two numbers, try showing 1 and 4 like I did. If you can think of another pair that makes five, show them on two hands and have your Shoulder Partner count to check if you are correct.

 **STUDENTS DO:** Show two numbers that add up to five on their two hands, turn to a **Shoulder Partner** to count and double check that the two numbers add up to five.

TEACHER SAY: We learned another way of putting numbers together yesterday. It is a fun way to add.

TEACHER DO: Draw a number bond on the board. Label the large circle at the top Whole and the two smaller circles at the bottom Part.

TEACHER SAY: This is called a number bond. A number bond shows the relationship between three numbers. It shows two parts that go together to make the one whole.

TEACHER DO: Hand out math journals and have students open them to the first blank page.

 **STUDENTS DO:** Open math journals to the next blank page.

TEACHER SAY: Listen as I tell you a math story. Then, draw pictures to show the problem. Our class went outside and counted 2 trees by our school. Can you draw 2 trees in your notebook? Remember to make simple drawings so you can be quick.

 **STUDENTS DO:** Draw 2 trees.

TEACHER SAY: Then we walked down the road and saw 4 more.

 **STUDENTS DO:** Draw 4 more trees.

TEACHER SAY: How many trees did we see in all? When you have an answer write the number on your paper.

 **STUDENTS DO:** Count the total number of trees. Write 6 on their paper.

TEACHER DO: As students are working, walk around and offer help as needed.

TEACHER SAY: Now turn and share your work with your Shoulder Partner. If you both agree on the answer give me a thumbs up. If you don't agree, talk to your partner and explain your answer and how you got it.

 **STUDENTS DO:** Talk with their partners and give a thumbs up.

TEACHER SAY: Great, now hold your work up for everyone to see.

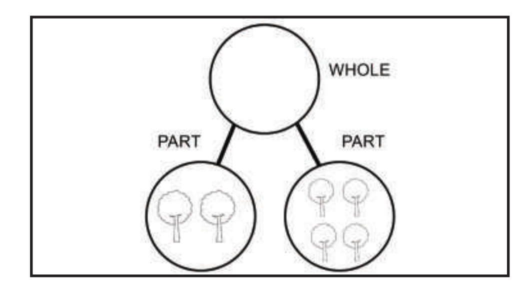
 **STUDENTS DO:** Hold their math journals in the air.

TEACHER DO: Draw a number bond on the board.

TEACHER SAY: The parts are the two different sets of trees we saw. What is the first Part? How many trees were in the first group we saw?

 **STUDENTS DO:** Respond together: 2.

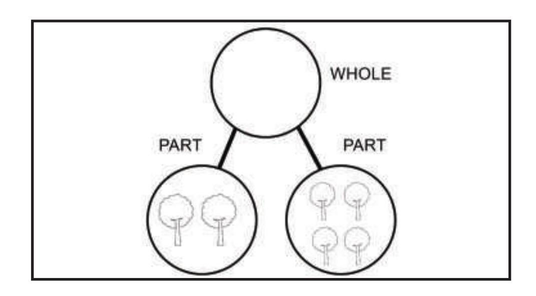
TEACHER SAY: I'm going to draw that Part on my number bond.



TEACHER SAY: What is the second Part? How many trees were in the second group we saw?

 **STUDENTS DO:** Respond together: 4.

TEACHER SAY: I'm going to draw that Part on my number bond.

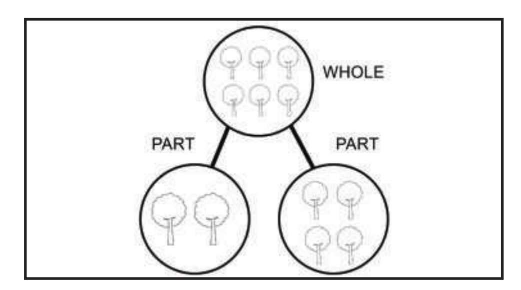


TEACHER SAY: **Great! The whole is the total number of trees that we saw. What was the total number? Raise your hand if you can tell me.**

 STUDENTS DO: Raise their hand.

TEACHER DO: Call on a student to share their answer. Selected student responds: 6.

TEACHER SAY: **Yes, we had 6 trees altogether, that is the whole. I'm going to draw the Whole on my number bond.**



TEACHER DO: Point at the lines on the number bond.

TEACHER SAY: **These lines show how these two parts go together to make the whole.**

TEACHER DO: Hand out number bonds to students (or have them draw one in their journals).

TEACHER SAY: **Write your name on your paper. Here is a number bond for you to try. Remember the Whole is the big circle with two lines going into it. The two small circles are the Parts. Draw your own number bond to go with the math story problem. Instead of using pictures, use numbers.**

 STUDENTS DO: Write numbers in the number bond to show the parts 2 and 4 and the whole 6.



Share (5-10 mins)

Directions

1. TEACHER SAY: **Let's see what you all learned today. Can you hold up your number bonds? What numbers are in the parts circles? Turn and tell your Shoulder Partner.**

 STUDENTS DO: Talk to their partners.

TEACHER SAY: **What number is in the whole circle? Turn and tell your Shoulder Partner.**

 STUDENTS DO: Talk to their partners.

TEACHER DO: Collect all bonds. Display correct bonds in the classroom or in the hallway.

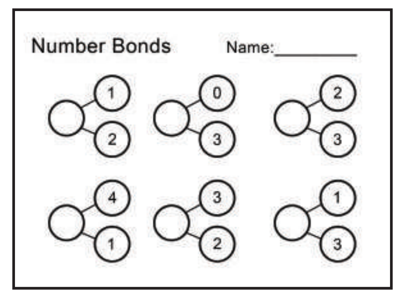
Lesson 39 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count from 1 to 10
- Use the counting on strategy within 10
- Represent composition to 5 using numeric number bonds

STUDENT VOCABULARY:

- Adding
- Count on
- Five frame
- Ninth
- Number bond



LESSON PREPARATION FOR THE TEACHER

- Create or print out a Number Bond Composition worksheet (one per student)
- Gather objects for students to use as counters (5 per student).
- Draw, color, and cut out 5 circles to use as counters on the board.
- Have tape available.

MATERIALS

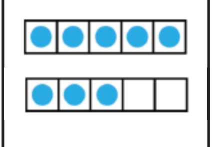
Calendar Math Area



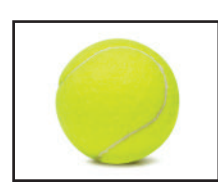
Clear counting jar



Five Frame
(from previous lesson)



Ball



Math journal and pencil



Counters (5 per student))



5 dot counters (for the teacher)



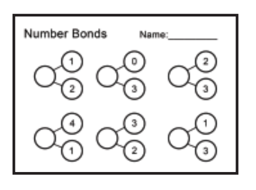
Tape

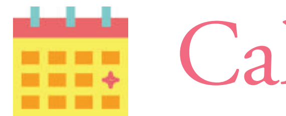


Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band



Number Bond Composition Worksheet (one per student)





Calendar (15-20 mins)

Directions

1. TEACHER SAY: **Join me for Calendar Math. I'm going to see who will be ready to be a Calendar Math Helper next week!**

TEACHER DO: Point to the top of the calendar

TEACHER SAY: **What month are we in? All of you tell me!**

STUDENTS DO: Respond together: (current month).

TEACHER DO: Point to today on the calendar.

TEACHER SAY: **Today is _______ (name of day). Repeat that whole sentence with me.**

 STUDENTS DO: Repeat the sentence "Today is ______."

TEACHER SAY: **Say the names of the days of the week with me as I point to them.**

 STUDENTS DO: Say the names of days of the week with the teacher.

TEACHER SAY: **How many days are in a week? All of you tell me!**

 STUDENTS DO: Respond together: 7.

TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: **Today is (day) the (number date) of (month) (year). Can you repeat the date with me?**

 STUDENTS DO: Repeat the date.

TEACHER SAY: **Now, it's time for movement math. Let's play Catch and Count again. Remember to toss the ball gently and pay attention!**

TEACHER DO: Begin the game by counting 1 and gently tossing the ball to a student. That student will stand and say 2 and gently toss the ball to a colleague. Count up to 10, then start again at 1. Game play continues until all students are standing.

 STUDENTS DO: Play the game, standing and gently tossing the ball as they count.

TEACHER DO: After all students are standing, collect the ball and have students sit down again.

2. TEACHER SAY: **Let's count our days. Today is the ninth day we are recording. This counting stick represents another 1. We will put it in our counting jar. Let's look at them and count together.**

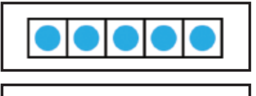
TEACHER DO: Pick up each stick and count them aloud.

TEACHER SAY: **How many sticks do we now have in the counting jar?**

 STUDENTS DO: Respond with the number of sticks in the jar: 9.

TEACHER SAY: **That's right, there are 9 counting sticks in the jar. How many do you think we will have tomorrow? How do you know? Raise your hand.**

 STUDENTS DO: Raise hands to volunteer. Selected student shares the answer and explains their thinking.

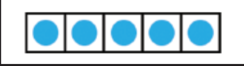


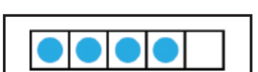

3. TEACHER SAY: Today, we are going to continue counting on our five frames. Let's count the dots we have so far together.

 **STUDENTS DO:** Count the dots aloud with the teacher.

TEACHER SAY: We said today is our 9th day. What do we need to do today to show 9 on our five frames?

 **STUDENTS DO:** Raise hands to answer the question. Selected student answers: add a dot.



TEACHER SAY: That's right! Let's add another dot.

TEACHER DO: Add a dot to the five frames.

TEACHER SAY: Let's count all the dots together.

 **STUDENTS DO:** Count the dots aloud with the teacher.

TEACHER SAY: We had 8 and now we have 1 more – 9. Who remembers our shortcut counting strategy – counting on? Who would like to explain it?

 **STUDENTS DO:** Raise hands to volunteer.

TEACHER DO: Allow selected student to explain. Offer assistance as needed. Then fully explain the strategy.

TEACHER SAY: Since we know this five frame has 5 dots, we don't have to count 1, 2, 3, 4, 5. We can just start at 5 and count on! I can start my counting at 5 by putting 5 in my hand.

TEACHER DO: Hold your hand over the full five frame. Say the number 5 and pretend to grab 5 in your hand.

TEACHER SAY: Now that I already have 5 in my hand I can count on to find out how many dots we have now. I have 5… 6, 7, 8, 9. Try that with me. First, grab 5 in your hand, and say 5.

 **STUDENTS DO:** Pretend to grab 5 in a hand and say 5.

TEACHER SAY: Then count on from five. Count with me: 5… 6, 7, 8, 9.

 **STUDENTS DO:** Count 5, 6, 7, 8, 9 aloud with teacher.



Learn (25-30 mins)

Directions

1. TEACHER SAY: We have been practicing putting numbers together. We call this adding, when we put smaller numbers together to make a bigger number. Can you remember two numbers you can put together, or add, to make 5? Use your fingers to help you think, if needed. Tell your Shoulder Partner first and use your fingers to prove it.

 **STUDENTS DO:** Talk to their partner.

TEACHER SAY: Now using two hands, can you hold up 2 numbers that can make 5? For example, I could hold up 2 fingers on this hand.

TEACHER DO: Hold up 2 fingers on right hand.

TEACHER SAY: And I could hold up 3 fingers on this hand.

TEACHER DO: Hold up 3 fingers on left hand.

TEACHER SAY: **Now I can check my work by counting each finger that I have up to make sure I get to 5.**

TEACHER DO: Tap each finger while counting.

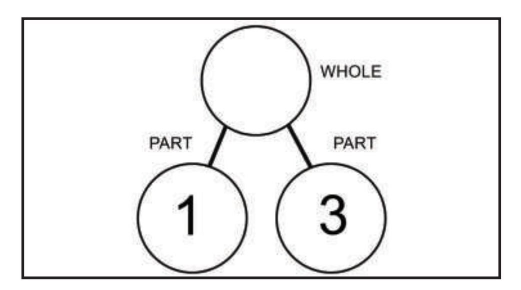
TEACHER SAY: **1, 2, 3, 4, 5. Now it's your turn. If you can't think of another two numbers, try showing 2 and 3 like I did. If you can think of another pair that makes five, show them on your two hands and have your Shoulder Partner count to check if you're right.**



STUDENTS DO: Show two numbers that add up to five on their two hands. Turn to a **Shoulder Partner** to count and double check that the two numbers add up to five.

TEACHER SAY: **Today you are going to practice putting numbers together – or adding – using number bonds.**

TEACHER DO: Hand out counters, then draw the first problem on the board: A number bond with parts of 1 and 3.



TEACHER SAY: **This number bond has the two parts filled in. I need to figure out what the whole is. I can use my counters to show these two numbers.**

TEACHER DO: Tape 1 counter in the 1 Part. Tape 3 counters in the 3 Part.

TEACHER SAY: **How do I find the Whole?**



STUDENTS DO: Raise hands to answer the question.

TEACHER DO: Call on students to answer the question.

TEACHER SAY: **If I put both of my Parts together and count them, I will find the Whole.**

TEACHER DO: Model moving all of your counters to the Whole circle. Count them aloud.

TEACHER SAY: **I put all of my counters together – I added them together – and moved them to the Whole circle. I counted 4 all together. So 1 and 3 make 4. Now you're going to try some on your own. But first, let me ask you something. What do you do if one of the parts is zero?**



STUDENTS DO: Raise their hands to share ideas.

TEACHER DO: Explain that a 0 part will simply not have anything in it. Moving all of the Parts together will still give you the Whole. Ask students if they have any questions.



STUDENTS DO: Raise hands to ask questions, if needed.

TEACHER DO: Hand out number bond worksheets and counters to students. Consider allowing students who need additional support to work with a partner.



STUDENTS DO: Work to complete the number bonds.

TEACHER DO: As students work, walk around the room to monitor their progress. Offer help to students who need it.

Note for the Teacher: Students may choose to use the beans or not. It is fine if they still need a concrete model for abstract numbers.



Share (5-10 mins)

Directions

1. **TEACHER SAY:** **Let's take a moment to check your answers with your Shoulder Partner. Choose 3 different problems and see if you agree on the answer. If you do not, use your beans to double check your work.**

 **STUDENTS DO:** Talk to their partners and check 3 problems on the worksheet.

TEACHER SAY: **Sometimes I will ask you to tell me how well you understand something we are learning. If you feel like you understand number bonds, give me a thumbs up. If you feel like you need some more help put your thumb to the side, and if you think you still need a lot of help, put your thumb down. How well do you understand number bonds after today?**

 **STUDENTS DO:** Gauge their learning on their thumbs.

Lesson 40 Overview

OVERVIEW

Students will:

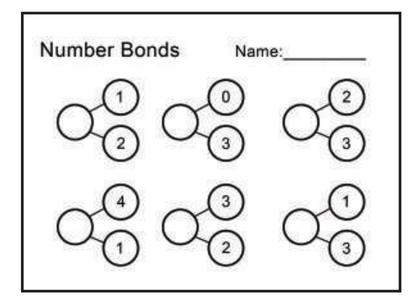
- Participate in Calendar Math activities
- Count from 1 to 10
- Use the counting on strategy within 10
- Represent composition to 5 using numeric number bonds

STUDENT VOCABULARY:

- Adding
- Count on
- Five frame
- Number bond
- Tenth

LESSON PREPARATION FOR THE TEACHER

- Create or print out a Number Bond Composition worksheet (one per student)



MATERIALS

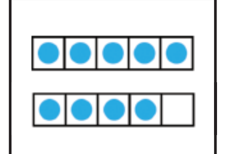
Calendar Math Area



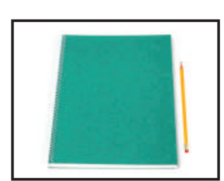
Clear counting jar



Five Frame
(from previous lesson)



Math journal and pencil



Counters
(5 per student, if needed)



5 dot counters (for the teacher)



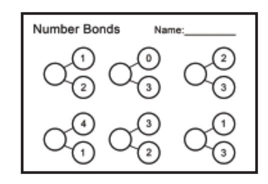
Tape



Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band



Number Bond Composition Worksheet (one per student)





Calendar (15-20 mins)

Directions

1. **TEACHER SAY: Join me for Calendar Math. I'm going to see who will be ready to be a Calendar Math Helper next week!**

TEACHER DO: Point to the top of the calendar

TEACHER SAY: What month are we in? All of you tell me!

 **STUDENTS DO:** Respond together: (current month).

TEACHER DO: Point to today on the calendar.

TEACHER SAY: Today is _______ (name of day). Repeat that whole sentence with me.

 **STUDENTS DO:** Repeat the sentence "Today is ______."

TEACHER SAY: Say the names of the days of the week with me as I point to them.

 **STUDENTS DO:** Say the names of days of the week with the teacher.

TEACHER SAY: How many days are in a week? All of you tell me!

 **STUDENTS DO:** Respond together: 7.

TEACHER DO: Point to today's date on the calendar.

TEACHER SAY: Today is (day) the (number date) of (month) (year). Can you repeat the date with me?

 **STUDENTS DO:** Repeat the date.

2. **TEACHER SAY: Let's play Jump Up together and count to 10. Stand up and squat down.**

 **STUDENTS DO:** Stand up and squat down. Play the Jump Up game, jumping up and shouting when they get to 10.

TEACHER DO: Play the Jump Up game with students. Repeat 1-2 times.

3. **TEACHER SAY: Let's count our days. Today is the tenth day we are recording. This counting stick represents another 1. We will put it in our counting jar. Let's look at them and count together.**

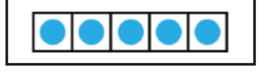
TEACHER DO: Pick up each stick and count them aloud.

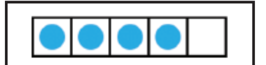
TEACHER SAY: How many sticks do we now have in the counting jar?

 **STUDENTS DO:** Respond with the number of sticks in the jar: 10.

TEACHER SAY: That's right, there are 10 counting sticks in the jar. How many do you think we will have tomorrow? How do you know? Raise your hand.

 **STUDENTS DO:** Raise hands to volunteer. Selected student shares the answer and explains their thinking.





4. **TEACHER SAY: Today, we are going to continue counting on our five frames. Let's count the dots we have so far together.**

 **STUDENTS DO:** Count the dots aloud with the teacher.

TEACHER SAY: We said today is10th day. What do we do today to show 10 on our five frames?



STUDENTS DO: Raise hands to answer the question. Selected student answers: add a dot.





TEACHER SAY: That's right! Let's add another dot.

TEACHER DO: Add a dot to the five frames.

TEACHER SAY: Let's count all the dots together.



STUDENTS DO: Count the dots aloud with the teacher.

TEACHER SAY: We had 9 and now we have 1 more – 10. Who remembers our shortcut counting strategy – counting on? Who thinks they can explain it?



STUDENTS DO: Raise hands to volunteer.

TEACHER DO: Allow selected student to explain. Offer assistance as needed. Then fully explain the strategy.

TEACHER SAY: Since we know this five frame has 5 dots, we don't have to count 1, 2, 3, 4, 5. We can just start at 5 and count on! I can start my counting at 5 by putting 5 in my hand.

TEACHER DO: Hold your hand over the full five frame. Say the number 5 and pretend to grab 5 in your hand.

TEACHER SAY: Now that I already have 5 in my hand I can count on to find out how many dots we have now. I have 5… 6, 7, 8, 9, 10. Try that with me. First, grab 5 in your hand, and say 5.



STUDENTS DO: Pretend to grab 5 in a hand and say 5.

TEACHER SAY: Then count on from five. Count with me: 5… 6, 7, 8, 9, 10.



STUDENTS DO: Count 5, 6, 7, 8, 9, 10 aloud with teacher.

5. TEACHER SAY: What do you notice about 10 on our five frames? Turn to your Shoulder Partner and talk about what you see.



STUDENTS DO: Talk to their shoulder partners about the five frames, noting that both are now full.

TEACHER DO: Use **Calling Sticks** to ask a few students what they notice about the five frames.

TEACHER SAY: That's right! We now have two full five frames. What do you think we will do tomorrow?

TEACHER DO: Use **Calling Sticks** to ask a few students for ideas.



Learn (25-30 mins)

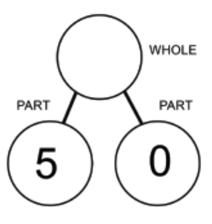
Directions

1. TEACHER SAY: We have been working on putting numbers together for a few days now. Who remembers what we call this?

TEACHER DO: Use **Calling Sticks** to ask a few students for ideas.

TEACHER SAY: That's right, we call this adding – when we put smaller numbers together to make a bigger number. We have been using number bonds to help us understand what happens when we put two numbers together. Today you are going to practice another set of number bonds that involve putting numbers together. Practice is what makes us better mathematicians!

TEACHER DO: Draw a blank number bond on the board.



TEACHER SAY: **What are the parts on my number bond?**

TEACHER DO: Use **Calling Sticks** to select students to answer the question.

 **STUDENTS DO:** Answer the question if selected by the teacher.

TEACHER SAY: **The parts are 5 and 0. I'm going to use my counters to show the parts.**

TEACHER DO: Tape 5 counters to the 5 part.

TEACHER SAY: **Why didn't I put any counters in the other part?**

TEACHER DO: Use **Calling Sticks** to select students to answer the question.

 **STUDENTS DO:** Answer the question if selected by the teacher.

TEACHER SAY: **Right, the second part is 0, so I don't put any counters in that circle. Now, we need to find the whole. How do I do that?**

TEACHER DO: Use **Calling Sticks** to select students to answer the question.

 **STUDENTS DO:** Answer the question if selected by the teacher.

TEACHER SAY: **Right, I need to put the parts together! I'm going to do that now with my counters.**

TEACHER DO: Move all counters to the Whole circle. Ask, what is the whole?

TEACHER DO: Use **Calling Sticks** to select students to answer the question.

 **STUDENTS DO:** Answer the question if selected by the teacher.

TEACHER SAY: **Yes, our whole is 5! Thank you for helping me add 0 and 5! Now you get to practice.**

TEACHER DO: Hand out number bond worksheets and counters to students.

 **STUDENTS DO:** Work on solving the problems.

TEACHER DO: As students work, walk around and monitor their progress. Consider pulling together a small group of students who need additional support.



Share (5-10 mins)

Directions

1. **TEACHER SAY: Let's take a moment to check your answers with your Shoulder Partner. Choose 3 different problems and see if you agree on the answer. If you do not, use your beans to double check your work.**

STUDENTS DO: Talk to their partners and check 3 problems on the worksheet.

TEACHER SAY: Sometimes I will ask you to tell me how well you understand something we are learning. If you feel like you understand number bonds, give me a thumbs up. If you feel like you need some more help put your thumb to the side, and if you think you still need a lot of help, put your thumb down. How well do you understand number bonds after today?

STUDENTS DO: Gauge their learning on their thumbs.

TEACHER DO: Take note of students who are struggling with Part-Whole relationships and number bonds. They may need additional support (for example, small group instruction) moving forward

KINDERGARTEN II

Mathematics

CHAPTER 5

Lessons 41-50

Overview

Lessons 41-50

COMPONENT	DESCRIPTION	TIME
Calendar	During this daily routine, students develop number sense, calendar sense, early place value concepts, counting fluency, and problem-solving skills.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from colleagues' perspectives.	5-10 minutes

Learning Indicators

Throughout this chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY :

- Count objects and tell how many there are.
- Count numbers up to 20, as a symbol, meaning, comparing, arranging.
- Read and write numerals from 0 to 20.
- Write numbers and represent quantities with a number, up to 20.
- Make equivalent (equal) sets.
- Apply the understanding that each successive number name refers to a quantity that is one larger as they count.
- Understand the concepts of greater than, less than, and equal to.
- Compare two numbers between 1 and 20 presented as written numerals.

OPERATIONS AND ALGEBRAIC THINKING:

- Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, or verbal explanations, expressions, or equations.
- Add or subtract within 20 using strategies such as
    - using objects or drawings to represent a problem
    - decomposing numbers into pairs in more than one way (e.g., 5=2+3 and 5=4+1)
    - finding the number that makes ten when added to any number 1-9.
- Fluently add and subtract within 10.

NUMBERS AND OPERATIONS IN BASE TEN:

- Compose and decompose numbers from 11-19 into ten/and some Chapter/ones using objects or drawings. For example, 12 means 10 and 2, and 15 means 10 and 5.

CH 5

Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
41	**Students will:** • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 11 as 10 and 1 more • Match numbers to their names • Find “one more” and “one less” than a number
42	**Students will:** • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 12 as 10 and 2 • Match numbers to their names • Find “one more” and “one less” than a number
43	**Students will:** • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 13 as 10 and 3 • Understand the relationship between numbers and quantities up to 10
44	**Students will:** • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 14 as 10 and 4 • Understand the relationship between numbers and quantities up to 10
45	**Students will:** • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 15 as 10 and 5 • Model composition and decomposition of number to 10 using actions, objects, and drawings.
46	**Students will:** • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 16 as 10 and 6 • Represent composition story situations within 10 with drawings using numeric number bonds

LESSON	INSTRUCTIONAL FOCUS
47	**Students will:** • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 17 as 10 and 7 • Represent composition within 10 using numeric number bonds
48	**Students will:** • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 18 as 10 and 8 • Represent decomposition within 10 using numeric number bonds
49	**Students will:** • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 19 as 10 and 9 • Represent decomposition within 10 using numeric number bonds
50	**Students will:** • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 20 as 2 tens • Represent decomposition and composition within 10 using numeric number bonds

Theme Preparation for the Teacher

- Prepare a class set of posters: Create or print out the number cards with tens-frames and adding the dots and dice or domino dots on each one.

Lesson 41 Overview

OUTCOMES
Students will: • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 11 as 10 and 1 more • Match numbers to their names • Find "one more" and "one less" than a number

STUDENT VOCABULARY:
• Math journal • Number strip • One more • One less • Share

1	2	3	4	5	6	7	8	9	10

LESSON PREPARATION FOR THE TEACHER
• Have available the two completed five frames from last week. • Create or print out two ten frames. Fill in one of the ten frames with dots. Keep the other ten frame blank. • Create or print out number strips (one per student). The teacher will need to draw one on the board or overhead projector. • Gather objects of different sizes and colors for students to count (1 per student and 1 for the teacher. Examples: beans, rocks, marbles, straws

MATERIALS

Calendar Math Area



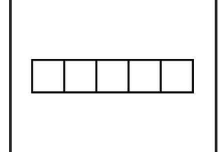
Number chart to 100



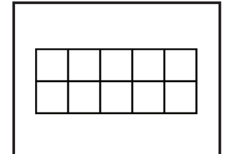
Rubber band for counting sticks



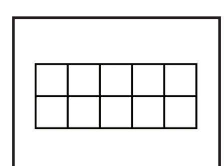
Five Frames completed in previous lesson



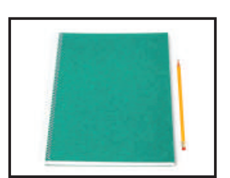
Ten Frame, completed by the teacher



Ten Frame, blank



Math journal and pencil



Objects of different sizes and colors for students to count 1 per student and 1 for the teacher. Examples: beans, rocks, marbles, straws



Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band



Number strips, either photocopy one per student or have them draw them in their math journal

1	2	3	4	5	6	7	8	9	10



Calendar (15-20 mins)

Directions

1. TEACHER SAY: Today one of you will be the teacher and lead us in Calendar Math.

TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Great job, now please sit down.

 **STUDENTS DO:** Helper student sits down.

TEACHER SAY: Let's count all the days on the calendar starting with one.

TEACHER DO: Point to each day and say the number together with the students until you reach today.

3. TEACHER SAY: Today we are going to continue practicing counting from 1 to 20. Please stand up. Our pattern will be hand clap, knee clap, hand clap, knee clap. Count one number on each clap.

 **STUDENTS DO:** Repeat the pattern and clapping until they reach number 20.

TEACHER SAY: Good job! Now let's take out our counting sticks and count them together: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. We have 10 counting sticks in our jar! When we reach the number ten we make a bundle. I will use this rubber band to keep the ten together. Our ones have now become a ten. Now we will add one more and we have eleven. Eleven is 1 ten…

TEACHER DO: Hold the bundle of ten to show the class.

TEACHER SAY: And 1 "one."

TEACHER DO: Hold the new counting stick in the air.

TEACHER SAY: How many sticks do we now have in the counting jar?

 **STUDENTS DO:** Say the number of sticks in the jar: 11.

TEACHER SAY: That's right, there are 11 counting sticks in the jar. How many do you think we will have tomorrow? Tell your Shoulder Partner.

 **STUDENTS DO:** Turn and tell their partner their idea.

TEACHER SAY: Who can raise their hand and share your thinking?

 **STUDENTS DO:** Raise hands and explain why they think their answer is correct.

4. TEACHER SAY: Today we are going to take our two full five frames from our last lesson and turn them into a ten frame.

TEACHER DO: Pick up the two finished five frames and a new ten frame with the dots to ten already made.

TEACHER SAY: **I put the ten we made with the two five frames onto a ten frame. Let's count the ten frame and make sure there are 10.**

TEACHER DO: Count all dots out loud with class.

TEACHER SAY: **Today is our eleventh day, but we only have 10 dots. So we need one more. I have an empty ten frame and on it, I will make one dot. Now we have eleven. Eleven is 10 and 1 more. Let's count the dots by ones first. Count with me.**

TEACHER DO: Touch each dot and count aloud.

 **STUDENTS DO:** Count aloud with the teacher.

TEACHER SAY: **Nice counting! Now let's try our trick where we put one number in our hand and then count on. This time I am going to put the 10 in my hand to represent the ten frame and then count one more.**

TEACHER DO: Pretend to grab the number 10 in your hand.

TEACHER SAY: **10…**

TEACHER DO: Hold up one finger.

TEACHER SAY: **And 1 more is 11. Now you say it.**

 **STUDENTS DO:** Say: 10 and 1 more is 11.



Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out number strips and 1 bean (or other type of counter) to students.

TEACHER SAY: **Do you remember the game called Beep? Today we are going to play it with our full number strip. You all have a number strip with the numbers 1-10 on them. Let's start by pointing to each number and saying its name out loud. When I point to the number 1, I say, "One". Help me count all the way to 10.**

 **STUDENTS DO:** Count from 1 to 10 with the teacher (while pointing on their number strips).

TEACHER SAY: **Great, this time I am going to cover one of the numbers from 1-10 with my counter, but it is a secret and I am not going to tell you which number it is.**

TEACHER DO: Take a counter and cover a number between 1 and 10.

TEACHER SAY: **I am going to count, but when I get to the number I have covered, I will say "beep" instead of saying the number. Point to each number on your number strip as I say it. If you hear me say beep instead of a number, mark it on your number strip with your counter.**

TEACHER DO: Say the numbers on your number strip. When you get to the number covered by the marker say "beep."

 **STUDENTS DO:** Listen to the teacher count and cover the number that is replaced with the word "beep" with a counter.

TEACHER SAY: **Ok, who can raise a hand and tell me which number I replaced with the word "beep"?**

 STUDENTS DO: Raise hands to volunteer. Selected student will respond.

2. TEACHER SAY: **Great, the beep number was ___. Now remove your counter and put your finger on that number. Who can tell me what is one more than the number? Remember "one more" means the next number down (to the right on) the line.**

 STUDENTS DO: Remove their counters and put their fingers on the number. Raise their hands when they know the answer to the question.

TEACHER DO: Call on a student and ask them to tell the class the answer.

3. TEACHER SAY: **Great, now let's put our fingers back on ___ (the beep number). This time I want you to use your number strip and figure out what is "one less" than the beep number. When you know, share your answer with your Shoulder Partner.**

 STUDENTS DO: Use the number strip to figure out the answer and share it with a **Shoulder Partner**.

TEACHER SAY: **Can someone raise a hand and share the answer with the class? What is one less than ____?**

 STUDENTS DO: Selected student answers the question.

TEACHER DO: Repeat Beep game with 3 more numbers following the above steps including "one more" and "one less."

4. TEACHER DO: Hand out math journals keeping one for yourselves and prepare to write on the board.

TEACHER SAY: **Please turn to the next page in your math journal. Let's practice writing the numbers 1, 2, 3, 4, 5 in order. Watch as I write the numbers on the board. You can also use your number strip to help you. Write them at the top of the page.**

TEACHER DO: Check students' math journals to make sure they have written the numbers in the correct order. Take note of students who may need additional instruction.

TEACHER SAY: **Great, now circle the one you are most proud of and hold your math journal in the air.**

 STUDENTS DO: Hold up their math journals.

5. TEACHER SAY: **Now I am going to tell you a math story and I want you to draw a picture to go along with it.**
I went fishing and caught 5 fish in the morning. Can you draw the fish in your math journal?

TEACHER DO: Walk around and check that students have drawn 5 fish. Help students who need additional support (or ask **Shoulder Partners** to help).

TEACHER SAY: **In the afternoon, I caught 1 more fish.**

TEACHER DO: Walk around and check that they have drawn 1 more fish.

TEACHER SAY: **How many fish did I catch that day? Tell your Shoulder Partner. Good, now who can raise a hand and share their answer?**

 STUDENTS DO: Raise their hands.

TEACHER DO: Call on a student and ask them what their answer is and how they got it.

 STUDENTS DO: Selected student shares the answer and shows how they got it.

TEACHER DO: If necessary, draw the story on the board to show students how to double check their work by recounting the fish. Collect the number strips.



Share (5 mins)

Directions

1. **TEACHER SAY: Please open your math journals to the picture you drew for the math story problem.**

 **STUDENTS DO:** Open math journals to the page where they drew an object.

TEACHER SAY: I want you to count the fish you drew in your picture by pointing to each one. When you know how many you have, say it quietly into your hand like this.

TEACHER DO: Cover your mouth and quietly say a number to model whispering an answer into your hand.

TEACHER SAY: Now you will show your Shoulder Partner how you counted your fish in your drawing. The student with longer hair will go first.

 **STUDENTS DO:** Take turns pointing and counting to the objects that they drew in their math journal.

TEACHER DO: Use **Calling Sticks** (or another strategy; for example, calling out or raised hands) to ask 3 students to share how many objects they drew in their journals.

 **STUDENTS DO:** Selected students share their journals with their colleagues.

TEACHER DO: Review journals to assess students' understanding of the math story and representing it in pictures. Note which students may need extra instruction or practice with the concept of "one more" or "one less."

Lesson 42 Overview

OUTCOMES
Students will: • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 12 as 10 and 2 • Match numbers to their names • Find "one more" and "one less" than a number

STUDENT VOCABULARY:
• Math journal • Number strip • One more • One less • Share

1	2	3	4	5	6	7	8	9	10

LESSON PREPARATION FOR THE TEACHER
• Have available the two completed five frames from last week. • Create or print out two ten frames. Fill in one of the ten frames with dots. Keep the other ten frame blank. • Create or print out number strips (one per student). The teacher will need to draw one on the board or overhead projector. • Gather objects of different sizes and colors for students to count (one per student and one for the teacher. Examples: beans, rocks, marbles, straws

MATERIALS

Calendar Math Area



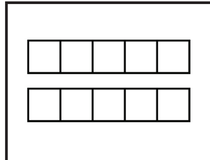
Number chart to 100



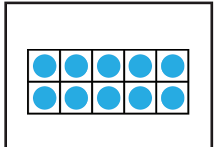
Rubber band for counting sticks



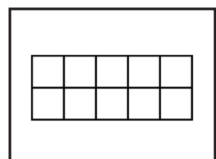
2 Five Frames completed in previous lesson



Ten Frame, completed by the teacher



Ten Frame, blank



Objects of different sizes and colors for students to count 1 per student and 1 for the teacher. Examples: beans, rocks, marbles, straws



Math journal and pencil



Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band



Number strips, either photocopy one per student or have them draw them in their math journal

1	2	3	4	5	6	7	8	9	10



Calendar (15-20 mins)

Directions

1. **TEACHER SAY: Just like yesterday, one of you will be the teacher and lead us in Calendar Math.**

TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar

TEACHER SAY: Great job, now please sit down.

 **STUDENTS DO:** Helper student sits down.

3. **TEACHER SAY: Let's count all the days on the calendar starting with 1.**

TEACHER DO: Point to each day and say the number together with the students until you reach today.

TEACHER SAY: Today we are going to continue practicing counting from 1 to 20. Please stand up. Our pattern will be two hand claps and two knee claps. Say one number on each clap.

 **STUDENTS DO:** Repeat the clapping pattern and counting until they reach number 20.

4. **TEACHER SAY: Let's take out our counting sticks and count them together. We will count them two ways. First I will take the rubber band off our set of 10, and we will count by ones.**

TEACHER DO: Take the rubber band off and count with the class. Pause at 10.

 **STUDENTS DO:** Count from 1 to 10 with the teacher. Pause at 10.

TEACHER DO: Put the rubber band back on the bundle. Pick up the extra stick.

TEACHER SAY: 11…

 **STUDENTS DO:** Say: 11…

TEACHER DO: Hold the new counting stick in the air.

TEACHER SAY: 12…

 **STUDENTS DO:** Say: 12…

TEACHER DO: Put the sticks back into the jar.

TEACHER SAY: How many sticks do we now have in the counting jar?

 **STUDENTS DO:** Say: 12!

TEACHER SAY: Now, let's practice counting by starting with our bundle of 10. Count with me.

TEACHER DO: Pick up bundle.

TEACHER SAY: 10…

 **STUDENTS DO:** Say: 10…

TEACHER DO: Hold up single sticks one at a time

TEACHER SAY: And 2 more makes 12. Ten and 2 more makes 12. Now you say it.

 **STUDENTS DO:** Say: 10 and 2 more makes 12.

TEACHER SAY: That's right, there are 12 counting sticks in the jar. How many do you think we will have tomorrow? Tell your Shoulder Partner.

 **STUDENTS DO:** Turn and tell their partner their idea.

5. TEACHER SAY: Today we are going to add one more dot to our ten frame.

TEACHER DO: Add a new dot to the ten frame.

TEACHER SAY: Help me count all the dots on the frames.

 **STUDENTS DO:** Count all dots with the teacher.

TEACHER SAY: Now, let's try a different way of counting: Let's try our trick where we put one number in our hand and then count on from that number.

TEACHER DO: Pretend to grab the number 10 in your hand.

TEACHER SAY: I put 10 in my hand to represent the ten frame. We don't have to count to 10 because we already know there are 10 dots on the ten frame.

TEACHER SAY: 10…

TEACHER DO: Hold up two fingers and tap them out while counting.

 **TEACHER SAY: 11, 12. Ten and 2 more makes 12. Now you say it.**

STUDENTS DO: Say: 10 and two more makes 12.



Learn (25-30 mins)

Directions

1. TEACHER DO: Draw a 1-10 number strip on the board.

TEACHER SAY: Yesterday, we played the game Beep and we talked about what the words "one more" and "one less" mean. If I put my finger on the number 7 on the number strip on the board, who can tell us what "one more" than 7 is? Raise your hand if you think you know.

 **STUDENTS DO:** Raise hands to volunteer. Selected students answer the question.

2. TEACHER DO: Hand out number strips and 1 bean or other type of counter to students.

TEACHER SAY: Today we are going to play Beep again. Just like yesterday, let's start by pointing to each number and saying its name out loud. Help me count all the way to 10.

 **STUDENTS DO:** Count from 1 to 10 while pointing on their number strips.

TEACHER SAY: Great! This time I am going to cover one of the numbers from 1-10 with my counter.

TEACHER DO: Take a counter and cover a number between 1 and 10.

TEACHER SAY: Now, I am going to count, but when I get to the number I have covered, I will say "beep" instead of saying the number. Point to each number on your number strip as I say it. If you hear me say beep instead of a number, mark it on your number strip with your counter.

TEACHER DO: Say the numbers on your number strip, when you get to the number covered by the marker say "beep."



STUDENTS DO: Listen to the teacher count and cover the number that is replaced with the word "beep" with a counter.

TEACHER SAY: Ok, who can raise their hand and tell me which number I replaced with the word "beep"?



STUDENTS DO: Raise hands to volunteer. Selected students answer the question.

TEACHER SAY: Well done! The beep number was _____. Now remove your counter and put your finger on that number. Who can tell me what is one more than the number?



STUDENTS DO: Remove counters and put a finger on the number. Raise a hand when they know the answer to the question. Selected student answers the question.

3. TEACHER SAY: Great, now let's put our fingers back on ___, the beep number. This time I want you to use your number strip and figure out what is "one less" than the beep number. When you know, share your answer with your Shoulder Partner.



STUDENTS DO: Use number strips to figure out answer and share it with **Shoulder Partner**.

TEACHER SAY: Can someone raise a hand and share their answer with the class? What is one less than ____?



STUDENTS DO: Raise hands to volunteer. Selected student answers the question.

TEACHER DO: Repeat Beep game with 1-2 more numbers following the above steps, as time allows.

4. TEACHER DO: Hand out math journals keeping one for yourselves and prepare to write on the board.

TEACHER SAY: Please turn to the next page in your math journal. Let's practice writing the numbers 1, 2, 3, 4, 5 in order like we did yesterday. Watch as I write the numbers on the board. You can also use your number strip to help you. Write them in the top of your journal.

5. TEACHER SAY: Great, now put a square around the one you are most proud of and hold your math journal in the air.



STUDENTS DO: Hold up their math journal.

6. TEACHER SAY: Now I am going to tell you another math story, like yesterday, and I want you to draw a picture to go along with it. I have 8 books at home. Draw 8 books. Remember that it doesn't have to look exactly like the item in the story.

TEACHER DO: Walk around and make sure everyone has drawn 8 books.

TEACHER SAY: Then I bought 1 more.

TEACHER DO: Walk around and make sure everyone has added 1 more book.

TEACHER SAY: Now, look at your drawing. How many books did I have all together? Tell your Shoulder Partner. Raise your hands if you agree.

STUDENTS DO: Tell a **Shoulder Partner** their answer and raise hands if they agree. Selected student shares the answer and shows how they got it

TEACHER DO: If necessary, draw the story on the board to show students how to double check their work by recounting the fish. Collect the number strips.



Share (5-10 mins)

Directions

1. **TEACHER SAY: Let's see what you all learned today. Please open your math journals to your picture.**

 **STUDENTS DO:** Open math journals to the page where they drew the story.

TEACHER SAY: I want you to count the books you drew in your picture by pointing to each one. When you know how many you have, whisper your answer into your hand.

 **STUDENTS DO:** Whisper their answers into their hands.

2. **TEACHER SAY: Now you will show your Shoulder Partner how you counted the books in the story. The student with shorter hair will go first.**

 **STUDENTS DO:** Take turns pointing and counting to the objects that they drew in their math journal.

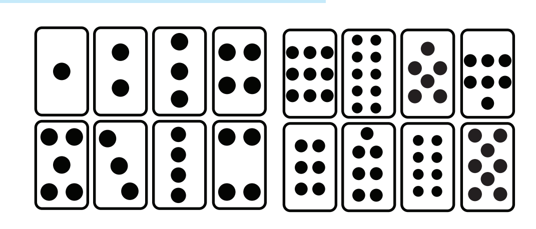
TEACHER DO: Use **Calling Sticks**, or another strategy such as calling out or raised hands to ask 3 students to share how many objects they drew in their journals.

 **STUDENTS DO:** Selected students share how many objects they drew in their journals.

TEACHER DO: Review student journals to assess their understanding of the math story and representing it in pictures. Note which students may need extra instruction or practice with the concept of "one more."

Lesson 43 Overview

OUTCOMES	STUDENT VOCABULARY:	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 13 as 10 and 3 • Understand the relationship between numbers and quantities up to 10	• Dot cards • Math journal	• Create or print out Flip and Record sheets (one per student). • Create or print out Flip and Record cards 1-5 and 6-10 (one set per student).



1	2	3	4	5	6	7	8	9	10

MATERIALS

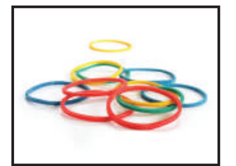
Calendar Math Area



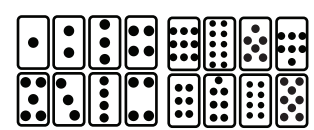
Number chart to 100



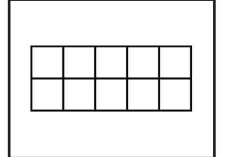
Rubber band for counting sticks



Flip and record cards 1-5 and 6-10, 1 set per student pre-cut



Ten frame



Math journal and pencil



Flip and Record sheet to 10, 1 per student

1	2	3	4	5	6	7	8	9	10

Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band





Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Great job, now please sit down.**

 **STUDENTS DO:** Helper student sits down.

3. TEACHER SAY: **Let's count all the days on the calendar starting with one.**

TEACHER DO: Point to each day and say the number together with the students until you reach today.

4. TEACHER SAY: **Today we are going to continue practicing counting from 1 to 20. Please stand up. Our pattern will be hand clap, head pat, hand clap, head pat. Say one number on each clap.**

 **STUDENTS DO:** Repeat the pattern and clapping until they reach number 20.

5. TEACHER SAY: **Let's take out our counting sticks and count them together. We will count them two ways. First I will take off the rubber band and we will count by ones. Count with me.**

 **STUDENTS DO:** Count the sticks along with the teacher.

TEACHER DO: Put the rubber band back on the bundle. Pick up the single sticks and count them with the class.

TEACHER SAY: **11, 12.**

TEACHER DO: Hold the new counting stick in the air.

TEACHER SAY: **13.**

TEACHER DO: Put the sticks back into the jar.

TEACHER SAY: **How many sticks do we now have in the counting jar?**

 **STUDENTS DO:** Say the number of sticks in jar.

6. TEACHER SAY: **Now, let's practice counting by starting with our bundle of ten. Help me count.**

TEACHER DO: Pick up bundle.

TEACHER SAY: **10…**

TEACHER DO: Hold up single sticks one at a time.

TEACHER SAY: 11, 12, 13. Ten and 3 more makes 13. Now you say it.

 STUDENTS DO: Say 10 and 3 more makes 13.

TEACHER SAY: That's right, there are 13 counting sticks in the jar. How many do you think we will have tomorrow? Tell your Shoulder Partner.

 STUDENTS DO: Turn and tell their partner their idea.

7. TEACHER SAY: Today we are going to add one more dot to our ten frame.

TEACHER DO: Add a new dot to the ten frame.

TEACHER SAY: Help me count the ones on the frames.

 STUDENTS DO: Count the dots on the frames with the teacher.

8. TEACHER SAY: Now, let's count starting at 10. Let's try our trick where we put one number in our hand and then count on.

TEACHER DO: Pretend to grab the number 10 in your hand.

TEACHER SAY: 10…

TEACHER DO: Hold up three fingers and tap them out while counting.

TEACHER SAY: 11, 12, 13. Now you count.

 STUDENTS DO: Count with the teacher, starting with 10.

TEACHER SAY: Ten and 3 more makes 13. Now you say it.

 STUDENTS DO: Say 10 and 3 more makes 13.

 STUDENTS DO: Count with teacher starting with ten.



Learn (25-30 mins)

Directions

TEACHER DO: Draw a 1-10 number strip on the board.

TEACHER SAY: Yesterday, we played the game Beep and we talked about what the words "one more" and "one less" mean. If I put my finger on the number 9 on the number strip on the board, can someone remind us what "one less" than 9 is? Raise your hand if you think you know.

 STUDENTS DO: Raise hands to volunteer. Selected student answers the question.

Note for the Teacher: This activity is another way for students to review number formation and to practice understanding the relationship between numbers and quantities up to 10. If photocopies cannot be made for students, the Flip and Record game can be played with a full class. You can either hold up the dot cards or draw them on the board for the students to see. You can also draw the recording sheets in the student notebooks, if needed.

2. TEACHER SAY: Today we are going to play Flip and Record. Do you remember when we played it before? We played it with the numbers 1-5. Today we are going to play with the numbers 1-10.

TEACHER DO: Either holds up the recording sheet or draws a large one on the board so all students can see it.

TEACHER SAY: This is our Flip and Record recording sheet. It is just like the one we used before except, on the bottom it has the numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. Let's count them across together.



STUDENTS DO: Count aloud with the teacher.

TEACHER SAY: Great! I have a stack of cards. Each card has a group of dots on them. Watch as I turn over one of the cards and count the dots on the card.

TEACHER DO: Count the dots on the card aloud.

TEACHER SAY: I counted ____ dots on my card. Now I will find that number on my recording sheet. I can just count over on the bottom the same number of dots and I will land on the write numeral. Then I copy the numeral in the box above.

TEACHER DO: Write the numeral in the box above.

TEACHER SAY: Then I take the card and put it face down in a separate pile. I will turn this pile over and use them again later. Now I will do the same thing with a new card.

TEACHER DO: Count the dots on the card aloud.

TEACHER SAY: I counted ____ dots on my card. Now I will find that number on my recording sheet. I can just count over on the bottom the same number of dots and I will land on the write numeral. Then I copy the numeral in the box above.

TEACHER DO: Write the numeral in the box above.

TEACHER SAY: Watch as I put the card I just used face down in the other pile. I play the game until one of my columns, the rows that go up and down, are filled with the numbers. Now you are going to play the game!

TEACHER DO: Hand each child a recording sheet and a pre-cut section of cards.



STUDENTS DO: Play the game turning over cards, counting the dots, and recording the numerals in the box.

TEACHER DO: Move around the room and help students as needed. Take note of students who may need additional instruction.



Share (5-10 mins)

Directions

1. TEACHER SAY: Let's see what you all learned today. Did anyone use a strategy to figure out where to record their numbers? A strategy is a plan you make to help you do something. How did you figure out where to write your numbers?



STUDENTS DO: Raise hands and share answers. Possible answers include: I counted the dots from one and then counted the numbers across the bottom starting at one until I had the same number, I recognized the dot pattern, etc.

Lesson 44 Overview

OUTCOMES

Students will:

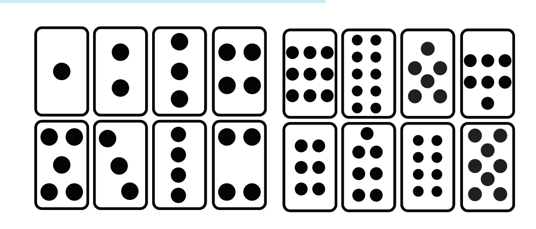
- Participate in Calendar Math activities
- Count from 1 to 20
- Recognize 14 as 10 and 4
- Understand the relationship between numbers and quantities up to 10

STUDENT VOCABULARY:

- Dot cards
- Math journal

LESSON PREPARATION FOR THE TEACHER

- Create or print out Flip and Record sheets (one per student).
- Create or print out Flip and Record cards 1-5 and 6-10 (one set per student).



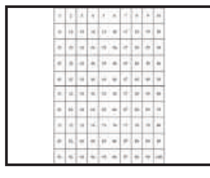
1	2	3	4	5	6	7	8	9	10

MATERIALS

Calendar Math Area



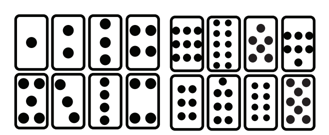
Number chart to 100



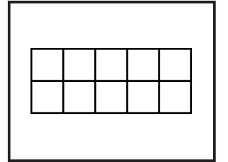
Rubber band for counting sticks



Flip and record cards 1-5 and 6-10, 1 set per student pre-cut



Ten frame



Math journal and pencil



Flip and Record sheet to 10, 1 per student

1	2	3	4	5	6	7	8	9	10

Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band





Calendar (15-20 mins)

Directions

TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Great job, now please sit down.**

 **STUDENTS DO:** Helper student sits down.

TEACHER SAY: **Let's count all the days on the calendar starting with one.**

TEACHER DO: Point to each day and say the number together with the students until you reach today.

2. TEACHER SAY: **Today we are going to continue practicing counting from 1 to 20. Please stand up. Our pattern will be hand clap, knee clap, and one toe tap (with hands). Say one number on each clap.**

 **STUDENTS DO:** Repeat the pattern and clapping until they reach number 20.

3. TEACHER SAY: **Let's take out our counting sticks and count them together. We will count them two ways. First I will take off the rubber band and we will count by ones.**

TEACHER DO: Take the rubber band off the tens group and count with the class.

TEACHER SAY: **1, 2, 3, 4, 5, 6, 7, 8, 9, 10…**

TEACHER DO: Put the rubber band back on the bundle. Pick up the single sticks and count them with the class.

TEACHER SAY: **11, 12, 13…**

TEACHER DO: Hold the new counting stick in the air.

TEACHER SAY: **14.**

TEACHER DO: Put the sticks back into the jar.

TEACHER SAY: **How many sticks do we now have in the counting jar?**

STUDENTS DO: Say the number of sticks in the jar.

4. TEACHER SAY: **Now, let's practice counting by starting with our bundle of ten. Help me count.**

TEACHER DO: Pick up bundle.

TEACHER SAY: **10…**

TEACHER DO: Hold up single sticks one at a time.

TEACHER SAY: **11, 12, 13, 14.**

TEACHER SAY: **Ten and 4 more makes 14. There are 14 counting sticks in the jar. How many do you think we will have tomorrow? Tell your Shoulder Partner.**

 **STUDENTS DO:** Turn and tell their partner their idea.

5. TEACHER SAY: **Today we are going to add one more dot to our ten frame.**

TEACHER DO: Add a new dot to ten frame.

TEACHER SAY: **Help me count the ones on the frames.**

TEACHER DO: Count all dots with class.

 **STUDENTS DO:** Count along with the teacher.

6. TEACHER SAY: **Now, let's count starting at 10. Let's try our counting trick where we put one number in our hand and then count on.**

TEACHER DO: Pretend to grab the number 10 in your hand.

TEACHER SAY: **10…**

TEACHER DO: Hold up 4 fingers and tap them out while counting.

TEACHER SAY: **11, 12, 13, 14. Now you do it.**

TEACHER DO: Pretend to grab the number 10 in your hand.

 **STUDENTS DO:** Say 10.

TEACHER DO: Hold up 4 fingers and tap them.

 **STUDENTS DO:** Count 1, 2, 3, 4.

TEACHER SAY: **Great job! Ten and 4 more makes 14. Now you say it.**

STUDENTS DO: Say 10 and 4 more makes 14.



Learn (25-30 mins)

Directions

TEACHER DO: Draw a picture of a dot card from the deck on the board.

TEACHER SAY: **Yesterday, we played the game Flip and Record. Can someone tell me how they counted their dots? Did you have a strategy that you used to make sure you only counted each dot one time?**

 **STUDENTS DO:** Raise hands to volunteer. Selected students share their strategies.

TEACHER DO: Call on several students to share.

TEACHER SAY: **Today we are going to play Flip and Record again. Let's review how to play.**

TEACHER DO: Refer to the directions in the previous lesson as needed to review the game. As you review the steps, ask students to help you recall how to play the game.

2. TEACHER DO: Hand each child a recording sheet and a pre-cut section of cards.



STUDENTS DO: Play the game, turning over cards, counting the dots, and recording the numerals in the box.

TEACHER DO: Move around the room and see if students need help.



Share (5-10 mins)

Directions

1. TEACHER SAY: Let's see what you all learned today. Did anyone use a new strategy to figure out where to record their numbers? How did you figure out where to write your numbers?



STUDENTS DO: Raise hands and share answers. Possible answers include: I counted the dots from one and then counted the numbers across the bottom starting at one until I had the same number, I recognized the dot pattern, etc.

Lesson 45 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count from 1 to 20
- Recognize 15 as 10 and 5
- Model composition and decomposition of number to 10 using actions, objects, and drawings.

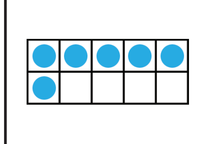
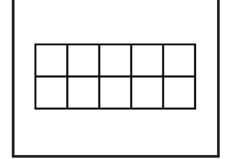
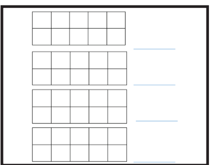
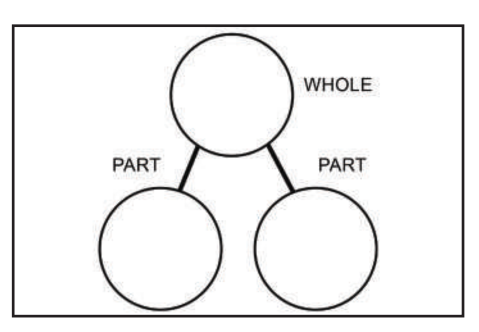
STUDENT VOCABULARY:

- Break apart
- Decompose
- Number bond

LESSON PREPARATION FOR THE TEACHER

- Create or print out ten frame worksheets(one per student).
- Draw, color, and cut out 6 large dots to use as counters (for the teacher only).
- Have tape available.
- Gather objects of different sizes and colors for students to count (6 per student and 6 for the teacher. Examples: beans, rocks, marbles, straws

MATERIALS

Calendar Math Area		Ten frame Card with 6 dots filled in	
Ten Frame		Tape	
Objects of different sizes and colors for students to count (up to 6) Examples: beans, rocks, marbles, straws		Math journal and pencil	
Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band		Ten frame worksheets, 1 per student	
Number Bond template (students will draw)			



Calendar (15-20 mins)

Directions

TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Great job, now please sit down.

 **STUDENTS DO:** Helper student sits down.

2. TEACHER SAY: Let's count all the days on the calendar starting with one.

TEACHER DO: Point to each day and say the number together with the students until you reach today.

TEACHER SAY: Today we are going to continue practicing counting from 1 to 20. Please stand up. Our pattern will be hand clap, clap overhead, hand clap, clap overhead. Say one number on each clap.

 **STUDENTS DO:** Repeat the pattern and clapping until they reach number 20.

3. TEACHER SAY: Let's take out our counting sticks and count them together. We will count them two ways. First I will take off the rubber band and we will count by ones.

TEACHER DO: Take the rubber band off and count with the class. Pause at 10.

 **STUDENTS DO:** Count the sticks with the teacher. Pause at 10 with the teacher.

TEACHER DO: Put the rubber band back on the bundle. Pick up the single sticks and count them with the class.

TEACHER SAY: 11, 12, 13, 14…

 **STUDENTS DO:** Count the single sticks with the teacher. Pause at 14 with the teacher.

TEACHER DO: Hold the new counting stick in the air.

TEACHER SAY: Count with me: 15.

 **STUDENTS DO:** Count the last stick with the teacher: 15.

TEACHER DO: Put the sticks back into the jar.

TEACHER SAY: How many sticks do we now have in the counting jar?

 **STUDENTS DO:** Say: 15.

5. TEACHER SAY: Now, let's practice counting by starting with our bundle of ten. Count with me.

TEACHER DO: Pick up bundle.

TEACHER SAY: **10…**

 STUDENTS DO: Say: 10.

TEACHER DO: Hold up single sticks one at a time.

TEACHER SAY: **11, 12, 13, 14, 15…**

 STUDENTS DO: Count 11, 12, 13, 14, 15 with the teacher.

TEACHER SAY: **Ten and 5 more is 15. Now you say it.**

 STUDENTS DO: Say: 10 and 5 more is 15.

TEACHER SAY: **There are 15 counting sticks in the jar. How many do you think we will have tomorrow? Tell your Shoulder Partner.**

 STUDENTS DO: Turn and tell their partner their idea.

6. TEACHER SAY: **Today we are going to add 1 more dot to our ten frame.**

TEACHER DO: Add a new dot to ten frame.

TEACHER SAY: **Help me count the ones on the frames.**

 STUDENTS DO: Count the dots aloud with the teacher to 15.

TEACHER SAY: **Now, let's count starting at 10. Let's try our counting trick where we put 10 in our hand and then count on. This time I am going to put the 10 in my hand to represent the ten frame and then count 5 more.**

TEACHER DO: Pretend to grab the number 10 in your hand.

TEACHER SAY: **10.**

 STUDENTS DO: Say: 10.

TEACHER DO: Point the dots on the unfilled ten frame and count on.

TEACHER SAY: **11, 12, 13, 14, 15.**

 STUDENTS DO: Count from 11 to 15 with the teacher.

TEACHER DO: Point at the ten frames.

TEACHER SAY: **Ten and 5 more is 15. Say it again with me.**

 STUDENTS DO: Say: 10 and 5 more is 15.



Learn (25-30 mins)

Directions

1. TEACHER DO: Hold up card with the number 6 written on it and the number 6 represented on a ten frame below.

TEACHER SAY: Today we are going to talk about the number 6. Can you help me count the dots on my ten frame card with me?

 **STUDENTS DO:** Count the number of dots with the teacher.

TEACHER SAY: 1, 2, 3, 4, 5, 6 – nice job! Now, I can also read this ten frame as 5 dots filled in on the top and 1 dot filled in on the bottom.

TEACHER DO: Show students the five dots on the top and one on the bottom.

2. TEACHER DO: Hand out ten frames worksheets.

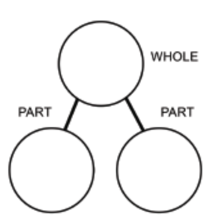
TEACHER SAY: Today we are going to practice making the number 6 in different ways. First you will draw it on the ten frame and then you will write the numeral. You have 5 frames to practice on. Make your ten frame look like mine with 6 dots. Then write the number 6.

 **STUDENTS DO:** Practice creating the number 6 on a ten frame and writing the numeral.

TEACHER DO: Walk around the classroom and see if anyone needs help. Make sure that students are filling in the ten frames correctly. While students work, hand out counters (a set of 6 per student).

3. TEACHER SAY: Great job counting to 6. Now we are going to explore the number 6.

TEACHER DO: Draw a blank number bond on the board (or somewhere all students can see). Write a 6 in the "whole" circle.



TEACHER SAY: I have written the number 6 in the big circle on my sheet. That is the "whole" circle because 6 is the whole number. Do you see the "parts" circles at the bottom? That's where we will put parts of 6.

TEACHER DO: Show students your large cut-out dots.

TEACHER SAY: I have 6 counters. I am going to use my counters to see how many different ways we can make the number 6. I'm going to start by putting 1 counter in this circle and the rest in the other circle.

TEACHER DO: Tape 1 dot in the first "part" circle and 5 dots in the second "part" circle.

 **STUDENTS DO:** Observe the teacher modeling number bonds and whole-part relationships.

TEACHER SAY: I have 1 dot in this circle. Now I'm going to count to see how many counters are in this circle.

TEACHER DO: Point to the remaining counters and count.

TEACHER SAY: 1, 2, 3, 4, 5. This means that 1 counter (point) and 5 counters (point) added

together makes 6. Part (point) added to part (point) makes the whole (point). Let's record that in our math journals.

4. TEACHER DO: Hand out math journals.

TEACHER SAY: Turn to your next clean sheet. At the top of your page write the number 6 and then draw a number bond underneath. I will show you how.



STUDENTS DO: Open journals to the next clean page. Write the number 6 at the top of the page.

TEACHER SAY: First we draw a big circle. Then we draw 2 small circles underneath the big circle. Then we draw lines connecting the small circles to the big circle. That's a number bond!



STUDENTS DO: Draw a number bond as modeled by the teacher.

TEACHER SAY: In the whole circle we will write the number 6.



STUDENTS DO: Write the number 6 in the "whole' circle in their journals.

TEACHER SAY: I remember that I put 1 counter in the first circle and 5 counters in the second circle. Now, we're going to write that in our math journals.

TEACHER DO: Model this on the board.



STUDENTS DO: Write a 1 in the first circle and 5 in the second circle.

5. TEACHER SAY: Now we know that 1 and 5 can make 6! Now, let's make a different combination of 6. I will put all my counters back on the 6 first. You do that, too.



STUDENTS DO: Put all 6 counters on the 6 in the "whole" circle.

TEACHER SAY: Who can tell me what number they would like to put in the first "part" circle? We are decomposing – or breaking apart – the number 6. That means we are looking at the smaller numbers that together make the bigger number 6.



STUDENTS DO: Raise hands to suggest a number for the first part circle.

TEACHER DO: Take a suggestion from a student for the next number to try. Walk through the same steps with that number and model how to record the answer. Help students build confidence with the activity so they can do it again with a different number another day.



STUDENTS DO: Follow along with the teacher.

TEACHER SAY: Now you try. Take your beans and see how many different ways you can decompose – or break apart – 6.



STUDENTS DO: Work on creating and recording combinations of counters that make 6.

TEACHER DO: Walk around and see which students need help.



Share (5-10 mins)

Directions

1. TEACHER SAY: Let's see what you all learned today. Hold your notebooks in the air and share your number bonds.



STUDENTS DO: Hold notebooks up.

TEACHER SAY: Would someone like to share a different combination that makes 6?

TEACHER DO: Call on three students to share.



STUDENTS DO: Selected students share their combinations and show their work.

Note for the Teacher: The decomposition story problem will be a new concept for students. Students are not expected to be able to solve this problem at this time. This activity is just a preview of what will happen later in the lessons. Use this time as a gauge to see which students pick up on the idea quickly and which ones want to add 4 and 6.

2. TEACHER SAY: Great, before we go, please turn to a new sheet and we are going to do a quick story problem. I went to the market and bought 6 eggs. Can you draw 6 eggs in your math journal?

TEACHER DO: Walk around and make sure students draw 6 eggs.

TEACHER SAY: On the way home, 4 of them broke! I didn't get any more eggs. I lost 4 of them. How many eggs did I have left? Use your drawing to help you figure out how many eggs I had left. Write your answer in your journal.



STUDENTS DO: Look at their pictures in their notebooks decide how many eggs are left. Write their answers in their journals.

TEACHER DO: Review students' journals to determine which students already have some understanding of subtraction concepts. Use this information to help you prepare to help students who may need additional support when subtraction lessons begin.

Lesson 46 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count from 1 to 20
- Recognize 16 as 10 and 6
- Represent composition story situations within 10 with drawings using numeric number bonds

STUDENT VOCABULARY:

- Break apart
- Decompose
- Number bond

LESSON PREPARATION FOR THE TEACHER

- Create or print out ten frame worksheets (1 per student).
- Draw, color, and cut out 7 large dots to use as counters (for the teacher only).
- Have tape available.
- Gather objects of different sizes and colors for students to count (7 per student and 7 for the teacher). Examples: beans, rocks, marbles, straws

MATERIALS

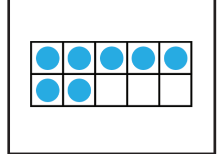
Calendar Math Area



Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band



Ten frame Cards
Number 7 with 7 dots filled in



Tape



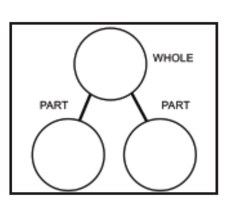
Objects of different sizes and colors for students to count (up to 7) Examples: beans, rocks, marbles, straws



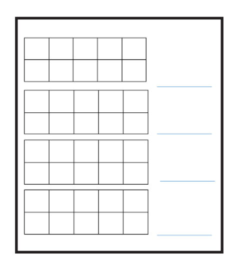
Math journal and pencil



Number Bond 7 template (students will draw)



Ten frame worksheets, 1 per student





Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Great job, now please sit down.

 **STUDENTS DO:** Helper student sits down.

TEACHER SAY: Let's count all the days on the calendar starting with one.

TEACHER DO: Point to each day and say the number together with the students until you reach today.

2. TEACHER SAY: Today we are going to continue practicing counting from 1 to 20. Please stand up. We will add something new to our pattern today. It will be hand clap, knee clap, shoulder tap and will continue until we reach the number 20. Remember to Say one number on each clap.

 **STUDENTS DO:** Repeat the pattern and clapping until they reach number 20.

3. TEACHER SAY: Let's take out our counting sticks and count them together. We will count them two ways. First I will take off the rubber band and we will count by ones.

TEACHER DO: Take the rubber band off and count with the class. Pause at 10.

 **STUDENTS DO:** Count aloud with the teacher. Pause at 10.

TEACHER DO: Put the rubber band back on the bundle. Pick up the single sticks and count them with the class.

TEACHER SAY: 11, 12, 13, 14, 15…

 **STUDENTS DO:** Count aloud with the teacher. Pause at 15.

TEACHER DO: Hold the new counting stick in the air.

TEACHER SAY: 16!

 **STUDENTS DO:** Count with the teacher: 16!

TEACHER DO: Put the sticks back into the jar.

TEACHER SAY: How many sticks do we now have in the counting jar?

 **STUDENTS DO:** Say: 16.

4. TEACHER SAY: Now, let's practice counting by starting with bundle of ten. Count with me.

TEACHER DO: Pick up bundle.

TEACHER SAY: **10.**

 **STUDENTS DO:** Say: 10.

TEACHER DO: Hold up single sticks one at a time

TEACHER SAY: **11, 12, 13, 14, 15, 16.**

 **STUDENTS DO:** Count to 16 with the teacher.

TEACHER SAY: **That's right, there are 16 counting sticks in the jar. Ten and 6 more makes 16. Now you say it.**

 **STUDENTS DO:** Say: 10 and 6 more makes 16.

TEACHER SAY: **How many do you think we will have tomorrow? Tell your Shoulder Partner.**

 **STUDENTS DO:** Turn and tell their partner their idea.

5. **TEACHER SAY:** **Today we are going to add 1 more dot to our ten frame.**

TEACHER DO: Add a new dot to ten frame.

TEACHER SAY: **Help me count the ones on the frames.**

 **STUDENTS DO:** Count dots aloud with the teacher.

TEACHER SAY: **Now, let's start counting at 10. Let's try our counting trick where we put one number in our hand and then count on. This time I am going to put the 10 in my hand to represent the ten frame and then count 4 more. Count with me.**

TEACHER DO: Pretend to grab the number 10 in your hand.

TEACHER SAY: **10.**

 **STUDENTS DO:** Say: 10.

TEACHER DO: Point the dots on the unfilled ten frame and count on.

TEACHER SAY: **11, 12, 13, 14, 15, 16.**

 **STUDENTS DO:** Count to 16 with the teacher.

TEACHER SAY: **We started counting at 10 and counted 6 more to 16. Ten and 6 more makes 16. Now you say it again.**

 **STUDENTS DO:** Say: 10 and 6 more makes 16.



Learn (25-30 mins)

Directions

1. TEACHER DO: Hold up a card with the number 7 written on it and the number 7 represented on a ten frame below.

TEACHER SAY: Today we are going to talk about the number 7. Can you help me count the dots on my ten frame card with me?

 **STUDENTS DO:** Count the number of dots with the teacher

TEACHER SAY: 1, 2, 3, 4, 5, 6, 7 nice job. Now, I can also read this ten frame as 5 dots filled in on the top and 2 dots filled in on the bottom.

TEACHER DO: Show students the five dots on the top and two on the bottom.

TEACHER DO: Hand out ten frame worksheets.

TEACHER SAY: That means that one way we can make the number 7 is with the numbers 5 and 2. Today we are going to practice making the number 7. First you will draw it on the ten frame and then you will write the numeral. You have 5 places on your paper to practice. Make your ten frame look like mine with 7 dots. Then write the number 7.

 **STUDENTS DO:** Practice creating the number 7 on a ten frame and writing the numeral.

TEACHER DO: Walk around the classroom and see if anyone needs help. Make sure that they are filling in their ten frames correctly. While students work, hand out counters (a set of 7 per student).

2. TEACHER SAY: Great job counting to 7. Now we are going to explore the number 7.

TEACHER DO: Draw a blank number bond on the board (or somewhere all students can see). Write a 7 in the "whole" circle.

TEACHER SAY: I have written the number 7 in the big circle on my sheet. That is the "whole" circle because 7 is the whole number. Do you see the "parts" circles at the bottom? That's where we will put parts of 7.

TEACHER DO: Show students your large cut-out dots.

TEACHER SAY: I have 7 counters. I am going to use my counters to see how many different ways we can make the number 7. I'm going to start by putting 1 counter in this circle and the rest in the other circle.

TEACHER DO: Tape 1 dot in the first "part" circle and 6 dots in the second "part" circle.

 **STUDENTS DO:** Observe the teacher modeling number bonds and whole-part relationships.

TEACHER SAY: I have 1 dot in this circle. Now I'm going to count to see how many counters are in this circle.

TEACHER DO: Point to the remaining counters and count.

TEACHER SAY: 1, 2, 3, 4, 5, 6. This means that 1 counter (point) and 6 counters (point) added together makes 7. Part (point) added to part (point) makes the whole (point). Let's record that in our math journals.

3. TEACHER DO: Hand out math journals.

TEACHER SAY: Turn to your next clean sheet. At the top of your page write the number 7 and then draw a number bond underneath. I will show you how.

STUDENTS DO: Open journals to the next clean page. Write the number 7 at the top of the page.

TEACHER DO: If needed, show students how to draw a number bond again.



STUDENTS DO: Draw a number bond as modeled by the teacher.

TEACHER SAY: **In the whole circle we will write the number 7.**



STUDENTS DO: Write the number 7 in the "whole" circle in their journals.

TEACHER SAY: **I remember that I put 1 counter in the first circle and 6 counters in the second circle. Now, we're going to write that in our math journals.**

TEACHER DO: Model this on the board.



STUDENTS DO: Write a 1 in the first circle and 6 in the second circle.

4. TEACHER SAY: **Now we know that 1 and 6 can make 7. Now, let's try and make a different combination of 7. I will put all my counters back on the seven first. You do that, too.**



STUDENTS DO: Put all 7 counters on the 7 in the "whole" circle.

TEACHER SAY: **Who can tell me what number they would like to put in the first "part" circle? We are decomposing, or breaking apart the number 7. That means we are looking at the smaller numbers that together make the bigger number 7.**



STUDENTS DO: Raise hands to suggest a number for the first part circle.

TEACHER DO: Take a suggestion from a student for the next number to try. Walk through the same steps with that number and model how to record the answer. Help students build confidence with the activity so they can do it again with a different number another day.



STUDENTS DO: Follow along with the teacher.

TEACHER SAY: **Now you try. Take your beans and see how many different ways you can decompose – or break apart – 7.**



STUDENTS DO: Work on creating and recording combinations of counters that make 7.

TEACHER DO: Walk around and see which students need help.



Share (5-10 mins)

Directions

1. TEACHER SAY: **Let's see what you all learned today. Hold your notebooks in the air and share your number bonds.**



STUDENTS DO: Hold notebooks up.

TEACHER SAY: **Would someone like to share a different combination that makes 7?**

TEACHER DO: Call on three students to share.



STUDENTS DO: Selected students show their number bonds with their colleagues.

Lesson 47 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count from 1 to 20
- Recognize 17 as 10 and 7
- Represent composition within 10 using numeric number bonds

STUDENT VOCABULARY:

- Break apart
- Decompose
- Number bond

LESSON PREPARATION FOR THE TEACHER

- Create or print out ten frame worksheets (1 per student)
- Draw, color, and cut out 8 large dots to use as counters (for the teacher only).
- Have tape available.
- Gather objects of different sizes and colors for students to count (8 per student and 8 for the teacher. Examples: beans, rocks, marbles, straws

MATERIALS

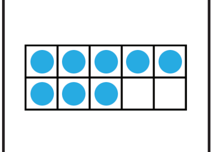
Calendar Math Area



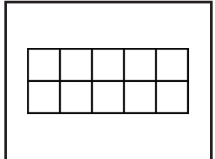
Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band



Ten frame Cards
Number 8 with 8 dots filled in



Ten frame



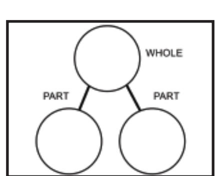
Objects of different sizes and colors for students to count (up to 8)Examples: beans, rocks, marbles, straws



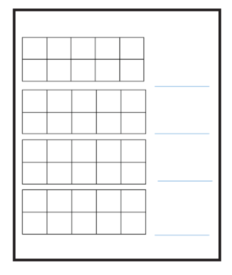
Math journal and pencil

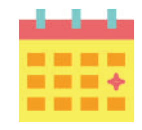


Number Bond 8 template, 1 per student



Ten frame worksheets, 1 per student





Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Great job, now please sit down.

 **STUDENTS DO:** Helper student sits down.

TEACHER SAY: Let's count all the days on the calendar starting with one.

TEACHER DO: Point to each day and say the number together with the students until you reach today.

2. TEACHER SAY: Today we are going to continue practicing counting from 1 to 20. Please stand up. Today's pattern is going to be a hand clap, knee clap, toe tap (with hands). We will continue until we reach the number 20. Remember to say one number on each clap.

 **STUDENTS DO:** Repeat the pattern and clapping until they reach number 20.

3. TEACHER SAY: Let's take out our counting sticks and count them together. We will count them two ways. First I will take off the rubber band and we will count by ones.

TEACHER DO: Take the rubber band off and count with the class.

 **STUDENTS DO:** Count aloud with the teacher to 10.

TEACHER DO: Put the rubber band back on the bundle. Pick up the single sticks and count them with the class.

TEACHER SAY: 11, 12, 13, 14, 15, 16…

 **STUDENTS DO:** Count to 16 with the teacher.

TEACHER DO: Hold the new counting stick in the air.

TEACHER SAY: 17!

 **STUDENTS DO:** Say: 17!

TEACHER DO: Put the sticks back into the jar.

TEACHER SAY: How many sticks do we now have in the counting jar?

 **STUDENTS DO:** Say: 17.

4. TEACHER SAY: Now, let's practice counting by starting with our bundle of 10. Count with me.

TEACHER DO: Pick up bundle

TEACHER SAY: **10.**

 **STUDENTS DO:** Say: 10.

TEACHER DO: Hold up single sticks one at a time.

TEACHER SAY: **11, 12, 13, 14, 15, 16, 17.**

 **STUDENTS DO:** Count to 17 with the teacher.

TEACHER SAY: **That's right, there are 17 counting sticks in the jar. Ten and 7 more makes 17. Now you say it.**

 **STUDENTS DO:** Say: 10 and 7 more makes 17.

TEACHER SAY: **How many do you think we will have tomorrow? Tell your Shoulder Partner.**

 **STUDENTS DO:** Turn and tell their partner their idea.

6. TEACHER SAY: **Today we are going to add 1 more dot to our ten frame.**

TEACHER DO: Add a new dot to ten frame.

TEACHER SAY: **Help me count the ones on the frames.**

 **STUDENTS DO:** Count the dots with the teacher.

7. TEACHER SAY: **Now, let's count starting at 10. Let's try our counting trick where we put one number in our hand and then count on. I will put 10 in my hand. Count with me.**

TEACHER DO: Pretend to grab the number 10 in your hand.

TEACHER SAY: **10.**

 **STUDENTS DO:** Say: 10.

TEACHER DO: Point the dots on the unfilled ten frame and count on.

 **STUDENTS DO:** Count to 17 with the teacher.

TEACHER SAY: **Ten and 7 more makes 17. Now you say it again.**

 **STUDENTS DO:** Say: 10 and 7 more makes 17.



Learn (25-30 mins)



Directions

1. TEACHER DO: Hold up card with the number 8 written on it and the number 8 represented on a ten-frame below.

TEACHER SAY: **Today we are going to talk about the number 8. Can you help me count the dots on my ten-frame card with me?**

 **STUDENTS DO:** Count the number of dots with the teacher.

TEACHER SAY: **1, 2, 3, 4, 5, 6, 7, 8 – nice job! Now, I can also read this ten frame as 5 dots filled in on the top and 3 dots filled in on the bottom.**

TEACHER DO: Show students the 5 dots on the top and 3 on the bottom.

TEACHER DO: Hand out ten-frame worksheets.

2. TEACHER SAY: One way I can make the number 8 is with the numbers 5 and 3. Today we are going to practice making the number 8. First you will draw it on the ten-frame and then you will write the numeral. Make your ten-frame look like mine with 8 dots. Then write the number 8.

 **STUDENTS DO:** Practice creating the number 8 on a ten-frame and writing the numeral.

TEACHER DO: Walk around the classroom and see if anyone needs help. Make sure that students are filling in the ten-frames correctly. While students work, hand out counters (a set of 8 per student).

3. TEACHER SAY: Great job counting to 8. Now we are going to explore the number 8.

TEACHER DO: Draw a blank number bond on the board (or somewhere all students can see). Write an 8 in the "whole" circle.

TEACHER SAY: I have written the number 8 in the big circle on my sheet. That is the "whole" circle because 8 is the whole number. Do you see the "parts" circles at the bottom? That's where we will put parts of eight.

TEACHER DO: Show students your large cut-out dots.

TEACHER SAY: I have 8 counters. I am going to use my counters to see how many different ways we can make the number 8. I'm going to start by putting 1 counter in this circle and the rest in the other circle.

TEACHER DO: Tape 1 dot in the first "part" circle and 7 dots in the second "part" circle.

 **STUDENTS DO:** Observe the teacher modeling number bonds and whole-part relationships.

TEACHER SAY: I have 1 dot in this circle. Now I'm going to count to see how many counters are in this circle.

TEACHER DO: Point to the remaining counters and count.

TEACHER SAY: 1, 2, 3, 4, 5, 6, 7. This means that 1 counter (point) and 7 counters (point) added together makes 8. Part (point) added to part (point) makes the whole (point). Let's record that in our math journals.

3. TEACHER DO: Hand out math journals.

TEACHER SAY: Turn to your next clean sheet. At the top of your page write the number 8 and then draw a number bond underneath.

 **STUDENTS DO:** Open journals to the next clean page. Write the number 8 at the top of the page.

TEACHER DO: If necessary, review how to draw a number bond.

 **STUDENTS DO:** Draw a number bond in their math journals.

TEACHER SAY: In the whole circle we will write the number 8.

 **STUDENTS DO:** Write the number 8 in the "whole' circle in their journals.

TEACHER SAY: I remember that I put 1 counter in the first circle and 7 counters in the second circle. Now, we're going to write that in our math journals.

TEACHER DO: Model this on the board.

 **STUDENTS DO:** Write a 1 in the first circle and 7 in the second circle.

4. TEACHER SAY: Now we know that 1 and 7 can make 8! Now, let's make a different combination of 8. I will put all my counters back on the 8 first. You do that, too.

 **STUDENTS DO:** Put all 8 counters on the 8 in the "whole" circle.

TEACHER SAY: Who can tell me what number they would like to put in the first "part" circle? We are decomposing, or breaking apart the number 8. That means we are looking at the smaller numbers that together make the bigger number 8.

 **STUDENTS DO:** Raise hands to suggest a number for the first part circle.

TEACHER DO: Take a suggestion from a student for the next number to try. Walk through the same steps with that number and model how to record the answer. Help students build confidence with the activity so they can do it again with a different number another day.

 **STUDENTS DO:** Follow along with the teacher.

TEACHER SAY: Now you try. Take your beans and see how many different ways you can decompose – or break apart – 8.

 **STUDENTS DO:** Work on creating and recording combinations of counters that make 8.

TEACHER DO: Walk around and see which students need help.



Share (5-10 mins)

Directions

1. TEACHER SAY: Let's see what you all learned today. Hold your notebooks in the air and share your number bonds.

 **STUDENTS DO:** Hold notebooks up.

TEACHER SAY: Would someone like to share a different combination that makes 8?

TEACHER DO: Call on three students to share.

 **STUDENTS DO:** Selected students share their combinations with their colleagues.

Lesson 48 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count from 1 to 20
- Recognize 18 as 10 and 8
- Represent decomposition within 10 using numeric number bonds

STUDENT VOCABULARY:

- Break apart
- Decompose
- Number bond

LESSON PREPARATION FOR THE TEACHER

- Create or print ten frame work-sheets (1 per student).
- Draw, color, and cut out 9 large dots to use as counters (for the teacher only).
- Have tape available.
- Gather objects of different sizes and colors for students to count (9 per student and 9 for the teacher. Examples: beans, rocks, marbles, straws

MATERIALS

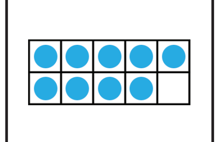
Calendar Math Area



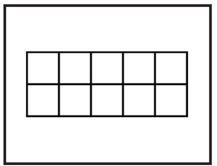
Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band



Ten frame Cards
Number 9 with 9 dots filled in



Ten frame



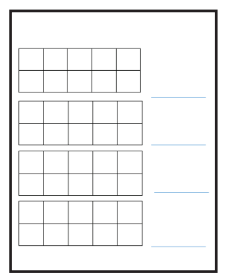
Objects of different sizes and colors for students to count (up to 9) Examples: beans, rocks, marbles, straws



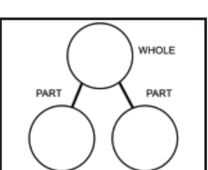
Math journal and pencil



Ten frame worksheets, 1 per student



Number Bond 9 tem-plate, 1 per student





Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Great job, now please sit down.**

 **STUDENTS DO:** Helper student sits down.

TEACHER SAY: **Let's count all the days on the calendar starting with one.**

TEACHER DO: Point to each day and say the number together with the students until you reach today.

2. TEACHER SAY: **Today we are going to continue practicing counting from 1 to 20. Please stand up. Today's pattern is going to be a hand clap, knee clap, toe tap (with hands). We will continue until we reach the number 20. Remember to say one number on each clap.**

 **STUDENTS DO:** Repeat the pattern and clapping until they reach number 20.

3. TEACHER SAY: **Let's take out our counting sticks and count them together. We will count them two ways. First I will take off the rubber band and we will count by ones.**

TEACHER DO: Take the rubber band off and count with the class.

 **STUDENTS DO:** Count aloud with the teacher to 10.

TEACHER DO: Put the rubber band back on the bundle. Pick up the single sticks and count them with the class.

TEACHER SAY: **11, 12, 13, 14, 15, 16, 17, 18…**

 **STUDENTS DO:** Count to 18 with the teacher.

TEACHER DO: Hold the new counting stick in the air.

TEACHER SAY: **18!**

 **STUDENTS DO:** Say: 18!

TEACHER DO: Put the sticks back into the jar.

TEACHER SAY: **How many sticks do we now have in the counting jar?**

 **STUDENTS DO:** Say: 18.

4. TEACHER SAY: **Now, let's practice counting by starting with our bundle of ten. Count with me.**

TEACHER DO: Pick up bundle.

TEACHER SAY: 10.

 **STUDENTS DO:** Say: 10.

TEACHER DO: Hold up single sticks one at a time.

TEACHER SAY: 11, 12, 13, 14, 15, 16, 17, 18.

 **STUDENTS DO:** Count to 18 with the teacher.

TEACHER SAY: That's right, there are 18 counting sticks in the jar. Ten and 8 more makes 18. Now you say it.

 **STUDENTS DO:** Say: 10 and 8 more makes 18.

TEACHER SAY: How many do you think we will have tomorrow? Tell your Shoulder Partner.

 **STUDENTS DO:** Turn and tell their partner their idea.

7. TEACHER SAY: Today we are going to add 1 more dot to our ten frame.

TEACHER DO: Add a new dot to ten frame.

TEACHER SAY: Help me count the ones on the frames.

 **STUDENTS DO:** Count the dots with the teacher.

5. TEACHER SAY: Now, let's count starting at 10. Let's try our trick where we put one number in our hand and then count on. I will put 10 in my hand. Count with me.

TEACHER DO: Pretend to grab the number 10 in your hand.

TEACHER SAY: 10.

 **STUDENTS DO:** Say: 10.

TEACHER DO: Point at the dots on the unfilled ten frame and count on.

 **STUDENTS DO:** Count to 18 with the teacher.

TEACHER SAY: Ten and 8 more makes 18. Now you say it again.

 **STUDENTS DO:** Say: 10 and 8 more makes 18.



Learn (25-30 mins)

Directions

1. TEACHER DO: Hold up card with the number 9 written on it and the number 9 represented on a ten-frame below.

TEACHER SAY: Today we are going to talk about the number 9. Can you help me count the dots on my ten-frame card with me?

 **STUDENTS DO:** Count the number of dots with the teacher.

TEACHER SAY: 1, 2, 3, 4, 5, 6, 7, 8, 9 – nice job! Now, I can also read this ten frame as 5 dots filled in on the top and 4 dots filled in on the bottom.

TEACHER DO: Show students the five dots on the top and four on the bottom.

2. TEACHER DO: Hand out ten-frame worksheets.

TEACHER SAY: One way I can make the number 9 is with the numbers 5 and 4. Today we are going to practice making the number 9. First you will draw it on the ten-frame and then you will write the numeral. Make your ten-frame look like mine with 9 dots. Then write the number 9.

 **STUDENTS DO:** Practice creating the number 9 on a ten-frame and writing the numeral.

TEACHER DO: Walk around the classroom and see if anyone needs help. Make sure that students are filling in the ten-frames correctly. While students work, hand out counters (a set of 9 per student).

3. TEACHER SAY: Great job counting to 9. Now we are going to explore the number 9.

TEACHER DO: Draw a blank number bond on the board (or somewhere all students can see). Write a 9 in the "whole" circle.

TEACHER SAY: I have written the number 9 in the big circle on my sheet. That is the "whole" circle because 9 is the whole number. Do you see the "parts" circles at the bottom? That's where we will put parts of 9.

TEACHER DO: Show students your large cut-out dots.

TEACHER SAY: I have 9 counters. I am going to use my counters to see how many different ways we can make the number 9. I'm going to start by putting 2 counters in this circle this time and the rest in the other circle.

TEACHER DO: Tape 1 2 dots in the first "part" circle and 7 dots in the second "part" circle.

 **STUDENTS DO:** Observe the teacher modeling number bonds and whole-part relationships.

TEACHER SAY: I have 2 dots in this circle. Now I'm going to count to see how many counters are in this circle.

TEACHER DO: Point to the remaining counters and count.

TEACHER SAY: 1, 2, 3, 4, 5, 6, 7. This means that 2 counters (point) and 7 counters (point) added together makes 9. Part (point) added to part (point) makes the whole (point). Let's record that in our math journals.

5. TEACHER DO: Hand out math journals.

TEACHER SAY: Turn to your next clean sheet. At the top of your page write the number 9 and then draw a number bond underneath.

 **STUDENTS DO:** Draw a number bond in their math journals.

TEACHER SAY: In the whole circle we will write the number 9.

 **STUDENTS DO:** Write the number 9 in the "whole' circle in their journals.

TEACHER SAY: I remember that I put 2 counters in the first circle and 7 counters in the second circle. Now, we're going to write that in our math journals.

TEACHER DO: Model this on the board.

 **STUDENTS DO:** Write a 2 in the first circle and 7 in the second circle.

6. TEACHER SAY: Now we know that 2 and 7 can make 9! Now, let's make a different combination of 9. I will put all my counters back on the 9 first. You do that, too.

 **STUDENTS DO:** Put all 9 counters on the 9 in the "whole" circle.

TEACHER SAY: **Who can tell me what number they would like to put in the first "part" circle? We are decomposing, or breaking apart the number 9. That means we are looking at the smaller numbers that together make the bigger number 9.**

 **STUDENTS DO:** Raise hands to suggest a number for the first part circle.

TEACHER DO: Take a suggestion from a student for the next number to try. Walk through the same steps with that number and model how to record the answer. Help students build confidence with the activity so they can do it again with a different number another day.

 **STUDENTS DO:** Follow along with the teacher.

TEACHER SAY: **Now you try. Take your beans and see how many different ways you can decompose – or break apart – 9.**

 **STUDENTS DO:** Work on creating and recording combinations of counters that make 9.

TEACHER DO: Walk around and see which students need help.



Share (5-10 mins)

Directions

1. **TEACHER SAY:** **Let's see what you all learned today. Hold your notebooks in the air and share your number bonds.**

 **STUDENTS DO:** Hold notebooks up.

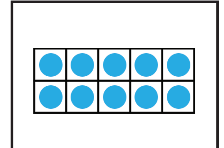
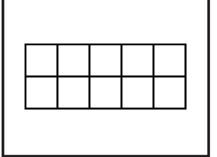
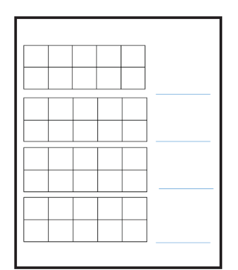
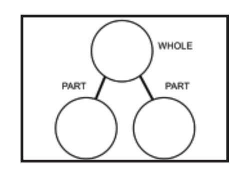
TEACHER SAY: **Would someone like to share a different combination that makes 9?**

TEACHER DO: Call on three students to share.

 **STUDENTS DO:** Selected students share their combinations with their colleagues.

Lesson 49 Overview

OUTCOMES	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 19 as 10 and 9 • Represent decomposition within 10 using numeric number bonds	• Create or print out ten frame worksheets (1 per student) • Draw, color, and cut out 10 large dots to use as counters (for the teacher only). • Have tape available. • Gather objects of different sizes and colors for students to count (10 per student and 10 for the teacher. Examples: beans, rocks, marbles, straws

MATERIALS			
Calendar Math Area		Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band	
Ten frame Cards Number 10 with 10 dots filled in		Ten frame	
Objects of different sizes and colors for students to count (up to 10) Examples: beans, rocks, marbles, straws		Math journal and pencil	
Ten frame worksheets, 1 per student		Number Bond 10 template	



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.



STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week

- All days of the week in order
- Point to the date on the calendar
- Today's date: Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Great job, now please sit down.**

 STUDENTS DO: Helper student sits down.

TEACHER SAY: **Let's count all the days on the calendar starting with one.**

TEACHER DO: Point to each day and say the number together with students until you reach today.

TEACHER SAY: **Today we are going to continue practicing counting from 1 to 20. Please stand up. Today's pattern is going to be a hand clap, knee clap, toe tap (with hands). We will continue until we reach the number 20. Remember to say one number on each clap.**

 STUDENTS DO: Repeat the pattern and clapping until they reach number 20.

2. TEACHER SAY: **Let's take out our counting sticks and count them together. We will count them two ways. First I will take off the rubber band and we will count by ones.**

TEACHER DO: Take the rubber band off and count with the class.

 STUDENTS DO: Count aloud with the teacher to 10.

TEACHER DO: Put the rubber band back on the bundle. Pick up the single sticks and count them with the class.

TEACHER SAY: **11, 12, 13, 14, 15, 16, 17, 18…**

 STUDENTS DO: Count to 18 with the teacher.

TEACHER DO: Hold the new counting stick in the air.

TEACHER SAY: **19!**

 STUDENTS DO: Say: 19!

TEACHER DO: Put the sticks back into the jar.

TEACHER SAY: **How many sticks do we now have in the counting jar?**

 STUDENTS DO: Say: 19.

3. TEACHER SAY: **Now, let's practice counting by starting with our bundle of ten. Count with me.**

TEACHER DO: Pick up bundle.

TEACHER SAY: **10.**

 STUDENTS DO: Say: 10.

TEACHER DO: Hold up single sticks one at a time.

TEACHER SAY: **11, 12, 13, 14, 15, 16, 17, 18, 19.**

 STUDENTS DO: Count to 19 with the teacher.

TEACHER SAY: **That's right, there are 19 counting sticks in the jar. Ten and 9 more makes 19. Now you say it.**

 STUDENTS DO: Say: 10 and 9 more makes 19.

TEACHER SAY: How many do you think we will have tomorrow? Tell your Shoulder Partner.

 **STUDENTS DO:** Turn and tell their partner their idea.

4. TEACHER SAY: Today we are going to add 1 more dot to our ten frame.

TEACHER DO: Add a new dot to ten frame.

TEACHER SAY: Help me count the ones on the frames.

 **STUDENTS DO:** Count the dots with the teacher.

5. TEACHER SAY: Now, let's count starting at 10. Let's try our counting trick where we put one number in our hand and then count on. I will put 10 in my hand. Count with me.

TEACHER DO: Pretend to grab the number 10 in your hand.

TEACHER SAY: 10.

 **STUDENTS DO:** Say: 10.

TEACHER DO: Point the dots on the unfilled ten frame and count on.

 **STUDENTS DO:** Count to 19 with the teacher.

TEACHER SAY: Ten and 9 more makes 19. Now you say it again.

 **STUDENTS DO:** Say: 10 and 9 more makes 19.



Learn (25-30 mins)

Directions

1. TEACHER SAY: Who can remember what number we worked with yesterday in our number bonds? Turn to your Shoulder Partner and tell them.

 **STUDENTS DO:** Turn to their **Shoulder Partner** and tell them what number they worked on yesterday.

TEACHER DO: Use **Calling Sticks** to choose one student to remind the entire class.

TEACHER SAY: That's right! Yesterday, we worked with the number 9. Who can tell me what one less than 9 is? Raise your hand if you think you know.

 **STUDENTS DO:** Raise a hand to answer. Selected student answers question.

TEACHER SAY: Very good! Today we are going to work with the number that is one MORE than 9. Who can tell us what number that is?

TEACHER DO: Use **Calling Sticks** to choose a student to answer.

 **STUDENTS DO:** Selected student answers question.

2. TEACHER SAY: Great job counting on and predicting the next number! Today we are going to talk about the number 10. Can you help me count the dots on my ten frame card with me?

 **STUDENTS DO:** Count the number of dots with the teacher

TEACHER SAY: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 – great work! Now, I can also read this ten frame as 5 dots filled in on the top and 5 dots filled in on the bottom.

TEACHER DO: Show students the five dots on the top and five on the bottom. Hand out the ten frame worksheets.

3. TEACHER SAY: That means one way I can make the number 10 is with the numbers 5 and 5. Today we are going to practice making the number 10. First you will draw it on the ten frame and then you will write the numeral. Make your ten frame look like mine with 10 dots.

STUDENTS DO: Practice creating the number 10 on a ten frame and writing the numeral.

TEACHER DO: Walk around the classroom and see if anyone needs help. Make sure that they are filling in their ten frames correctly. While students work, hand out counters (a set of 10 per student).

4. TEACHER SAY: Great job counting to 10. Now we are going to explore the number 10.

TEACHER DO: Draw a blank number bond on the board (or somewhere all students can see). Write a 10 in the "whole" circle.

TEACHER SAY: I have written the number 10 in the big circle on my sheet. That is the "whole" circle because 10 is the whole number. Do you see the "parts" circles at the bottom? That's where we will put parts of 10.

TEACHER DO: Show students your large cut-out dots.

TEACHER SAY: I have 10 counters. I am going to use my counters to see how many different ways we can make the number 10. I'm going to start by putting 3 counters in this circle and the rest in the other circle.

TEACHER DO: Tape 3 dots in the first "part" circle and 7 dots in the second "part" circle.



STUDENTS DO: Observe the teacher modeling number bonds and whole-part relationships.

TEACHER SAY: I have 3 dots in this circle. Now I'm going to count to see how many counters are in this circle.

TEACHER DO: Point to the remaining counters and count.

TEACHER SAY: 1, 2, 3, 4, 5, 6, 7. This means that 3 counters (point) and 7 counters (point) added together makes 10. Part (point) added to part (point) makes the whole (point). Let's record that in our math journals.

5. TEACHER DO: Hand out math journals.

TEACHER SAY: Turn to your next clean sheet. At the top of your page write the number 10 and then draw a number bond underneath.



STUDENTS DO: Open journals to the next clean page. Write the number 10 at the top of the page and draw a number bond.

TEACHER SAY: In the "whole" circle we will write the number 10.



STUDENTS DO: Write the number 10 in the "whole' circle in their journals.

TEACHER SAY: I remember that I put 3 counters in the first circle and 7 counters in the second circle. Now, we're going to write that in our math journals.

TEACHER DO: Model this on the board.



STUDENTS DO: Write a 3 in the first circle and 7 in the second circle.

6. TEACHER SAY: Now we know that 3 and 7 can make 10! Now, let's make a different combination of 10. I will put all my counters back on the 10 first. You do that, too.



STUDENTS DO: Put all 10 counters on the 10 in the "whole" circle.

TEACHER SAY: Who can tell me what number they would like to put in the first "part" circle? We are decomposing – or breaking apart – the number 10. That means we are looking at the smaller numbers that together make the bigger number 10.

 **STUDENTS DO:** Raise hands to suggest a number for the first part circle.

TEACHER DO: Take a suggestion from a student for the next number to try. Walk through the same steps with that number and model how to record the answer. Help students build confidence with the activity so they can do it again with a different number another day.

 **STUDENTS DO:** Follow along with the teacher.

TEACHER SAY: Now you try. Take your beans and see how many different ways you can decompose – or break apart – 10.

 **STUDENTS DO:** Work on creating and recording combinations of counters that make 10.

TEACHER DO: Walk around and see which students need help.



Share (5-10 mins)

Directions

1. TEACHER SAY: Let's see what you all learned today. Hold your notebooks in the air and share your number bonds.

 **STUDENTS DO:** Hold notebooks up.

TEACHER SAY: Would someone like to share a different combination that makes 10?

TEACHER DO: Call on three students to share.

 **STUDENTS DO:** Raise hands to volunteer. Selected students share their combinations with their colleagues.

Note for the Teacher: The decomposition story problem is a new concept for students. Students are not expected to be able to solve this problem at this time. This activity is just a preview of what will happen later in the lessons. Use this time as a gauge to see which students pick up on the idea quickly and which ones want to add 4 and 2.

2. TEACHER SAY: Great, before we end, please turn to a new sheet and let's do some quick story math. I found 4 seashells in the ocean. Can you draw 4 seashells? I gave 2 to my friend. How many seashells do I have left?

 **STUDENTS DO:** Draw and solve the math story in math journals.

TEACHER DO: Review students' journals to determine which students already have some understanding of subtraction concepts. Use this information to help you prepare to help students who may need additional support when subtraction lessons begin.

Lesson 50 Overview

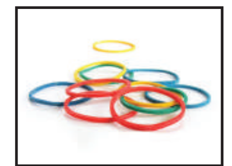
OUTCOMES	STUDENT VOCABULARY:	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 20 • Recognize 20 as 2 tens • Represent decomposition and composition within 10 using numeric number bonds	• Break apart • Decompose • Number bond	• Draw, color, and cut out 10 large dots to use as counters (for the teacher only). • Have tape available. • Gather objects of different sizes and colors for students to count (10 per student and 10 for the teacher. Examples: beans, rocks, marbles, straws

MATERIALS

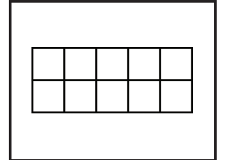
Calendar Math Area



Rubber band for new counting 10 bundle



Ten frame



Objects of different sizes and colors for students to count (up to 10) Examples: beans, rocks, marbles, straws

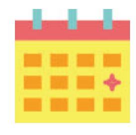


Math journal and pencil



Drinking straws, wooden sticks, chenille stems, or other slender counting sticks that can be held together with a rubber band





Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

2. TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week

- All days of the week in order
- Point to the date on the calendar
- Today's date: Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Great job, now please sit down.**

STUDENTS DO: Helper student sits down.

TEACHER SAY: **Let's count all the days on the calendar starting with one.**

TEACHER DO: Point to each day and say the number together with the students until you reach today. If the date goes beyond 20, model how to count beyond 20 for students and have them join only if they already know the numbers.

STUDENTS DO: Count with the teacher.

3. TEACHER SAY: **Today we are going to continue practicing counting from 1 to 20. Please stand up. Let's try our original pattern again: We are going to clap, knee clap, clap, knee clap while we count.**

STUDENTS DO: Repeat the pattern and clapping until they reach number 20.

4. TEACHER SAY: **Let's take out our counting sticks and count them together. We will count them two ways. First I will take off the rubber band and we will count by ones. Who can guess how many sticks are in our rubber band? Raise your hand if you think you know.**

STUDENTS DO: Raise hands to answer.

TEACHER DO: Call on a student to answer. If the student correctly says 10, ask how they know. Then, take the rubber band off to double check the count with the class.

STUDENTS DO: Count with the teacher to double check that there are 10.

TEACHER DO: Re-bundle the first 10 sticks and return them to the jar.

5. TEACHER DO: Pick up the single sticks and continue counting with the class.

STUDENTS DO: Continue counting with the teacher 11, 12, 13, 14, 15, 16, 17, 18, 19…

TEACHER DO: Hold the new counting stick in the air.

TEACHER SAY: **20!**

STUDENTS DO: Say: 20!

6. TEACHER SAY: **Today is a special day. We now have 20 sticks! We have 2 tens. Let's double check by counting our loose sticks. Count them with me.**

TEACHER DO: Hold up the loose sticks.

STUDENTS DO: Count the loose sticks with the teacher. Confirm there are 10 sticks.

TEACHER SAY: **Remember, every time we get to 10 sticks, we bundle them together. Let's put a rubber band around these sticks. How many bundles of 10 do we have now?**

STUDENTS DO: Respond together: 2.

TEACHER SAY: **Right! We have two bundles of ten. Two bundles of tens make 20. We can count them like this.**

TEACHER DO: Picks up one bundle

TEACHER SAY: **10.**

TEACHER DO: Picks up second bundle

TEACHER SAY: **20. Now let's say that together three times.**

TEACHER DO: Holds up the bundles one at a time.

 STUDENTS DO: Count 10, 20 three times with the teacher.

7. TEACHER SAY: **Today we are going to add 1 more dot to our ten frame.**

TEACHER DO: Add a new dot to the ten frame.

TEACHER SAY: **Help me count the ones on the frames.**

 STUDENTS DO: Count the dots aloud with the teacher.

TEACHER SAY: **Now, let's count starting at 10. Let's do our counting trick where we put one number in our hand and then count on. I will put 10 in my hand. Count with me.**

TEACHER DO: Pretend to grab the number 10 in your hand.

TEACHER SAY: **10. But today, we can put TWO 10's in our hands.**

TEACHER DO: Point to one filled ten frame.

TEACHER SAY: **10.**

STUDENTS SAY: **10.**

TEACHER DO: Point to the other filled ten frame.

TEACHER SAY: **20.**

 STUDENTS DO: 20.

TEACHER SAY: **Now let's try that together three times.**

 STUDENTS DO: Repeat pointing to the ten frames and counting by 10's three times.



Learn (25-30 mins)

Directions

Note for the Teacher: Use this Learn segment to review decomposing numbers up to 10 using the number bonds and counters. Choose which numbers you would like students to decompose. If students need additional support, consider having them work in pairs.

Students will need math journals and ten counters. You will need large cut-out dots and tape and number bond drawn on the board.

If necessary, refer to yesterday's lesson to review the directions for using number bonds.



Share (5-10 mins)

Directions

1. TEACHER SAY: **Let's see what you all learned this week. I would like five students to share something they learned this week. I would like to hear from friends who I haven't heard from before (or very often).**

 STUDENTS DO: Raise hands to volunteer. Selected students share their learning.

KINDERGARTEN II

Mathematics

CHAPTER 6

Lessons 51-60

Overview

Lessons 51-60

COMPONENT	DESCRIPTION	TIME
Calendar	During this daily routine, students develop number sense, calendar sense, early place value concepts, counting fluency, and problem-solving skills.	15-20 minutes
Learn	During this daily routine, students learn and apply various math skills as the teacher guides them through review, instruction, and practice.	25-30 minutes
Share	During this daily routine, students develop their ability to express mathematical ideas by talking about their discoveries, using math vocabulary, asking questions to make sense of learning tasks, clarifying misconceptions, and learning to see things from colleagues' perspectives.	5-10 minutes

Learning Indicators

Throughout this chapter, students will work toward the following learning indicators:

COUNTING AND CARDINALITY:

- Count objects and tell how many there are.
- Count numbers up to 20, as a symbol, meaning, comparing, arranging.
- Read and write numerals from 0 to 20.
- Write numbers and represent quantities with a number, up to 20.
- Make equivalent (equal) sets.
- Apply the understanding that each successive number name refers to a quantity that is one larger as they count.
- Understand the concepts of greater than, less than, and equal to.
- Compare two numbers between 1 and 20 presented as written numerals.

OPERATIONS AND ALGEBRAIC THINKING:

- Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, or verbal explanations, expressions, or equations.
- Add or subtract within 20 using strategies such as
    - finding the number that makes ten when added to any number 1-9
- Fluently add and subtract within 10.

MEASUREMENT:

- Compare orally between length and weight and size using longer than/shorter than, lighter/heavier, bigger/smaller.
- Collect and classify data using objects and drawings (up to 20).
- Classify objects into given categories (for example length, weight, size, color) and sort categories by count.

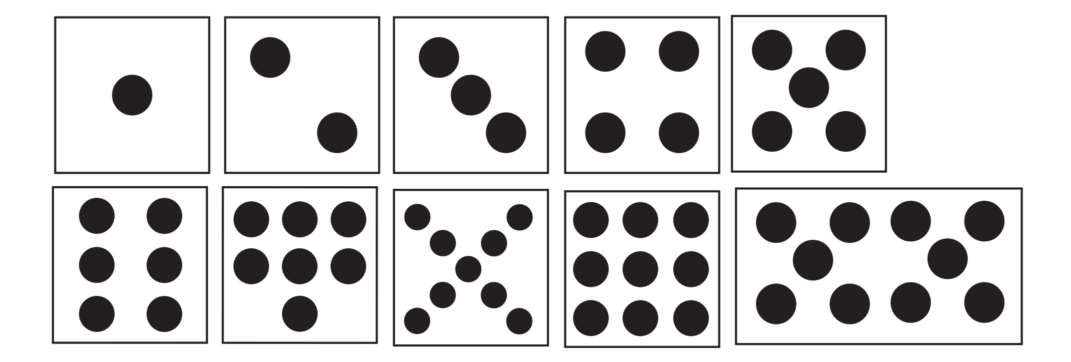
CH 6 Pacing Guide

LESSON	INSTRUCTIONAL FOCUS
51	**Students will:** • Participate in Calendar Math activities • Count from 1 to 20 • Write the numeral 11 • Identify the number of objects in familiar groupings without counting • Compare lengths using longer and shorter
52	**Students will:** • Participate in Calendar Math activities • Count from 1 to 20 • Write the numeral 12 • Identify the number of objects in familiar groupings without counting • Compare lengths using longer and shorter
53	**Students will:** • Participate in Calendar Math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 13 • Identify the number of objects in familiar groupings without counting • Collect data to create a picture graph • Compare data on a picture graph
54	**Students will:** • Participate in Calendar Math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 14 • Identify the number of objects in familiar groupings without counting • Compare numerical data using greater than, less than, and equal to
55	**Students will:** • Participate in Calendar Math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 15 • Identify the number of objects in familiar groupings without counting • Compare numerical data using greater than, less than, and equal to
56	**Students will:** • Participate in Calendar Math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 16 • Identify the number of objects in familiar groupings without counting • Compare weights using heavier and lighter

LESSON	INSTRUCTIONAL FOCUS
57	**Students will:** • Participate in Calendar Math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 17 • Identify the number of objects in familiar groupings without counting • Compare weights using heavier and lighter
58	**Students will:** • Participate in Calendar Math activities • Count from 1 to 20 • Identify the number of objects in familiar groupings without counting • Find combinations that make 10
59	**Students will:** • Participate in Calendar Math activities • Count from 1 to 20 • Identify the number of objects in familiar groupings without counting • Find combinations that make 10
60	**Students will:** • Participate in Calendar Math activities • Count from 1 to 20 • Write the numeral 20 • Represent quantities from 1 to 20 in drawings

Theme Preparation for the Teacher

- Create Quick Image Cards for numbers 1-10, sized about 15 cm x 15 cm each (Examples shown below)



Lesson 51 Overview

Longer	Shorter

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count from 1 to 20
- Write the numeral 11
- Identify the number of objects in familiar groupings without counting
- Compare lengths using longer and shorter

STUDENT VOCABULARY:

- Compare
- Different
- Longer
- Quick Images
- Same
- Shorter

LESSON PREPARATION FOR THE TEACHER

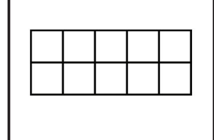
- Find a stick (or other straight object, such as string/yarn) 60-80 cm long. Students will compare objects to the stick using the terms longer and shorter.
- Create a large T-Chart with the headings Longer and Shorter.

MATERIALS

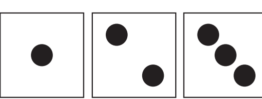
Calendar Math Area



Three Ten frames (two from previous lesson and one blank one)



3 Quick Image cards (See Lesson Preparation for the Teacher for instructions and examples.)



Stick (or string/yarn), 60-80 cm long



T-Chart labeled Longer and Shorter (See Lesson Preparation for the Teacher for instructions and examples.)

Math journal and pencil



OPTIONAL Video Resources:
TITLE: Length Part 1

https://tinyurl.com/yanhawkr





Calendar (15-20 mins)

Directions

1. **TEACHER SAY: Today one of you will be the teacher and lead us in Calendar Math.**

TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Great job, you may have a seat.

 **STUDENTS DO:** Helper student sits down.

2. **TEACHER DO:** Prepare for movement math

TEACHER SAY: Today we are going to practice counting to 20 while pretending to bounce a ball. Watch how I can move my hand up and down pretending there is a ball underneath it.

TEACHER DO: Model pretending to bounce a ball under one hand.

TEACHER SAY: Every time I push my hand down I will say a number. Watch as I count while bouncing: 1, 2, 3. Can you show me how you pretend to bounce a ball?

 **STUDENTS DO:** Practice bouncing a ball with their hands.

TEACHER SAY: Great, now let's count to 20 together as we bounce.

 **STUDENTS DO:** Count to 20 with the teacher while pretending to bounce a ball.

Note for the Teacher: Students will be counting beyond 20 today. This has been modeled on the calendar when they have counted the days, but this concept may still unfamiliar to them.

3. **TEACHER SAY: We've been counting days with two math tools – counting sticks and ten frames. Now that we've counted up to 20, we will use only our ten frames. We need to add 1 more dot to our ten frame to show today. Then we will count together.**

 **TEACHER DO:** Add a new dot to the ten frame.

TEACHER SAY: Can I have a volunteer come up and touch each dot on the ten frame and help us count by ones?

 **STUDENTS DO:** Raise hands to volunteer.

TEACHER SAY: (Student name) will help us count today. Please count along with them.

 **STUDENTS DO:** Count aloud together.

TEACHER SAY: Now, let's count by tens. Watch as I ball my fists up and then let the fingers fly to count to 10. I am counting all 10 fingers at the same time. We have 2 tens so I am going to do it 2 times.

TEACHER DO: Ball up fists and then release them.

TEACHER SAY: **10**

TEACHER DO: Ball up fists and then release them.

TEACHER SAY: **20**

TEACHER DO: Point to the ten frame with the one dot.

TEACHER SAY: **Now we count on with our new dot.**

TEACHER DO: Hold up 1 finger.

TEACHER SAY: **So we have 10, 20, and 1 more – 21. Let's practice counting to 21 with our flying fingers.**



STUDENTS DO: Flying fingers (ball up fists and release) 2 times to count to 20 and then use 1 finger to represent 1.

Note to Teacher: Quick Images will be a new routine. Quick Images are pictures that represent quantities and encourage students to build on their subitizing skills (the ability to recognize quantities without counting). This routine should be quick in order to help students move past counting by ones. Since the images are only shown for a few seconds, students are challenged to conceptually subitize, improving their numeracy and mental math ability.

4. TEACHER SAY: **Today we are going to add something new to our calendar routine. I am going to show you a card with dots on it, but I am only going to give you a few seconds to look at it. When you think you know how many dots are on the card, give me a silent thumbs up on the table.**

TEACHER DO: Hold the first card up for 3 seconds for the class to see, then flip it back over so they can no longer see the dots.

TEACHER SAY: **Now, put a silent thumb up when you know. We keep silent so everyone else can do their own thinking.**



STUDENTS DO: Show thumbs up on the table when they know the answer.

TEACHER SAY: **Now I am going to call on some students to see what answer they got.**

TEACHER DO: Call on a student with their thumb up.

TEACHER SAY: **How many dots did you see?**



STUDENTS DO: Respond to the question.

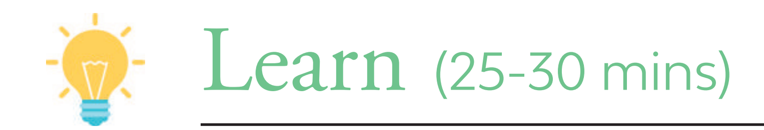
TEACHER SAY: **How did you know it so quickly? Can you explain to the class what you did?**



STUDENTS DO: Explain how they got their answer. Their response may include things like:

- I counted all the dots by one.
- I just knew that the number was _____.
- And as the dot cards become more advanced, students might answer with:
- I saw a grouping, such as 2 and 2 and counted up to 4.
- I just knew that the number was 4.
- I recognized the pattern.

TEACHER DO: Call on several different students to share their thinking and repeat the steps above. Then repeat the procedure with the remaining cards.



Directions

1. **TEACHER DO:** Hand out math journals and have students open them to the next blank page.

 **STUDENTS DO:** Open math journals to next blank page.

TEACHER SAY: Let's practice writing numbers together. We're going to do 10 old numbers and 1 new one – 11. First, stand up and we will Sky Write numbers 1 through 10.

 **STUDENTS DO:** Stand and sky write numbers 1 through 10 with the teacher.

TEACHER SAY: Now we're going to write our new number – 11! We write 11 with a 1 and a 1. Sky Write it with me three times.

 **STUDENTS DO:** Sky write 11 with the teacher.

TEACHER SAY: Wonderful! Now, sit down and write 11 three times in your math journals.

 **STUDENTS DO:** Sit and write 11 three times in their journals.

TEACHER SAY: Hold up your journals and show everyone your work.

 **STUDENTS DO:** Hold up their journals to show their 11's. Keep journals for Share.

2. **TEACHER SAY: Let's talk about comparing. Who can tell us what we do when we compare? What are we looking for?**

 **STUDENTS DO:** Raise hands to respond. Selected students answer the question.

TEACHER SAY: When we compare, we look for ways the objects are the same and different. We can also look for specific things, such as which object is bigger or smaller, which is heavier or lighter. Today, we'll be comparing objects to see which is longer or shorter. Who can tell us what they know about long and short?

 **STUDENTS DO:** Raise hands to respond. Selected students answer the question.

TEACHER DO: Display T-Chart.

TEACHER SAY: Good thinking! Take a look at this stick.

TEACHER DO: Hold up stick for students to see.

TEACHER SAY: I am going to look around the room for something that is longer than this stick.

TEACHER DO: Model how to look around the room. Think aloud about your comparisons and finding the longer object. Model and think aloud lining the objects up at the bottom.

TEACHER SAY: This object is longer than my stick. I made sure they were lined up at the bottom and I compared them.

TEACHER DO: Draw your stick at the top of the T-Chart. Then draw your longer item on the Longer side of the T-Chart.

TEACHER SAY: Now, I am going to look for something shorter than my stick.

TEACHER DO: Model how to look around the room. Think aloud about your comparisons and finding the shorter object. Model and think aloud lining the objects up at the bottom.

TEACHER SAY: This object is shorter than my stick. I made sure they were lined up at the bottom and I compared them.

TEACHER DO: Draw your shorter item on the Shorter side of the T-Chart.

TEACHER SAY: Are you ready to find longer and shorter objects?

 **STUDENTS DO:** Confirm they are ready.

TEACHER SAY: Look around the room. See if you can find an object that you think is longer than my stick. Look quietly with your eyes. When you find an object you want to compare, raise your hand.

TEACHER DO: Give students about 1 minute to look around the room.

 **STUDENTS DO:** Look quietly around the room for an object longer than the teacher's stick. Raise hands if they find something.

TEACHER DO: Call on a student with a raised hand.

 **STUDENTS DO:** Selected student gets the object they want to compare and takes it to the front of the room. Student lines up the bottoms of the object and compares to see if their object is longer than the teacher's stick.

TEACHER SAY: Give your colleague a thumbs up if their object is longer than my stick.

 **STUDENTS DO:** Compare the objects and give a thumbs up if the object is longer.

TEACHER DO: If the object is longer, draw it on the Longer side of the T-Chart. If the object is not longer, ask students what else they could say about the object and the stick. If students do not know, explain.

TEACHER SAY: We can't say that the object _______ (students' name) brought up is longer than my stick, but we can say that it is shorter than my stick.

TEACHER DO: If the object is shorter, draw it on the Shorter side of the T-Chart.

TEACHER SAY: Let's try some more comparisons.

TEACHER DO: Repeat the process, asking students to find items to compare to your stick. You can either ask them to look specifically for longer and shorter items, or you can ask them to find an item they would like to compare. For all items, have the student bring the object to the stick, line up the bottoms, and compare. Add objects to the T-Chart in appropriate column.

TEACHER SAY: Well done! We'll talk about longer and shorter again tomorrow. See if you can practice using the words at home tonight.



Share (5 mins)

Directions

1. **TEACHER SAY: When might it be important to know whether something is longer or shorter than something else? Take some think time, then turn and talk to your Shoulder Partner about your ideas.**

 **STUDENTS DO:** Take think time, then talk to their shoulder partners about their ideas.

TEACHER DO: Use **Calling Sticks** to select students to share their thinking. Take note of ideas that indicate strong understanding and those that do not. Thank all students who shared their thinking.

Lesson 52 Overview

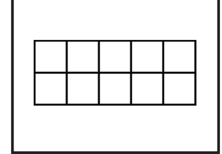
OUTCOMES	STUDENT VOCABULARY:	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Count from 1 to 20 • Write the numeral 12 • Identify the number of objects in familiar groupings without counting • Compare lengths using longer and shorter	• Compare • Length • Longer • Longest • Quick Images • Shorter • Shortest	• Create sets of small objects for students to compare by length (one per small group). Objects should include readily-available items, such as different-sized crayons, different-sized pencils, different-sized markers, different-sized paintbrushes, a ruler, an eraser, a plastic spoon, a straw, a paper clip, a clothespin)

MATERIALS

Calendar Math Area



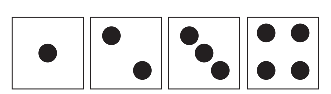
Three Ten Frames (from previous lesson)



Sets of small objects for students to compare by length (See Lesson Preparation for the Teacher for instruction and an example.)



4 Quick Image cards



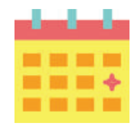
Math journal and pencil



OPTIONAL Video Resources:
TITLE: Length Part 2

https://tinyurl.com/y7f9jlaq





Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

2. TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Great job, you may sit down.**

 **STUDENTS DO:** Helper student sits down.

3. TEACHER DO: Prepare for movement math

TEACHER SAY: **Today we are going to practice counting to 20 by snake counting. Watch as I say the number one while moving my arms like a snake.**

TEACHER DO: Move hand and arm forward like a slithering snake while saying the number 1.

TEACHER SAY: **Now I will use my other arm to make a snake and say the number 2.**

TEACHER DO: Move hand and arm forward like a slithering snake while saying the number 2.

TEACHER SAY: **We will switch arms with each number. Are you ready to count like a snake? Let's snake count together.**

 **STUDENTS DO:** Count to 20 with the teacher while moving arms like snakes.

4. TEACHER SAY: **Now let's look at our ten frames. We need to add 1 more dot to our ten frame to show today. Then we will count together.**

TEACHER DO: Add a new dot to the ten frame.

TEACHER SAY: **Can I have a volunteer come up and touch each dot on the ten frame and help us count by ones?**

 **STUDENTS DO:** Raise hands to volunteer.

TEACHER SAY: **(Student name) will help us count today. Please count along with them.**

 **STUDENTS DO:** Count aloud together.

TEACHER SAY: **Now, let's count by tens. Watch as I ball my fists up and then let the fingers fly to count to 10. I am counting all 10 fingers at the same time. We have 2 tens so I am going to do it 2 times. Today you will repeat after me, but tomorrow you will do it along with me.**

TEACHER DO: Ball up fists and then release them.

TEACHER SAY: **10**

TEACHER DO: Ball up fists and then release them.

TEACHER SAY: **20**

TEACHER DO: Point to the ten frame with the two single dots.

TEACHER SAY: **Now we count on with our single dots.**

TEACHER DO: Hold up 2 fingers.

TEACHER SAY: **So we have 10, 20… 21, 22. Let's practice counting to 22 with our flying fingers.**

 **STUDENTS DO:** Flying fingers (ball up fists and release) 2 times to count to 20 and then use 2 fingers to represent 2.

5. TEACHER DO: Transition to Quick Images.

TEACHER SAY: **Remember the quick images from yesterday? We're going to do it again, but there might be a new one this time! I am going to show you a card with dots on it, but I am only going to give you 3 seconds to look at it. When you think you know how many dots are on the card, please give me a silent thumbs up on the table.**

TEACHER DO: Hold the first card up for 3 seconds for the class to see, then flip it back over so they can no longer see the dots.

TEACHER SAY: **Put a silent thumb up if you know how many dots were on the card. Keep silent so everyone else can do their own thinking.**

 **STUDENTS DO:** Put thumbs on the table if they know how many dots were on the card.

TEACHER SAY: **Great, look at all of those silent thumbs. I am going to call on some students to see what answer they got.**

TEACHER DO: Call on a student with their thumb up.

TEACHER SAY: **How many dots did you see?**

 **STUDENTS DO:** Respond to the question.

TEACHER SAY: **How did you know it so quickly? Can you explain to the class what you did?**

STUDENTS DO: Explain how they got their answer. Their response may include things like:

- • I counted all the dots by one.
- • I just knew that the number was _____.
- As the dot cards become more advanced, students might answer with:
- • I saw a grouping, such as 2 and 2 and counted up to 4.
- • I just knew that the number was 4.
- • I recognized the pattern.

TEACHER DO: Call on several different students to share their thinking and repeat the steps above. Then repeat the procedure with the remaining cards.



Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out math journals and have students open them to the next blank page.

 **STUDENTS DO:** Open math journals to next blank page.

TEACHER SAY: **Let's practice writing numbers together. We're going to do 11 old numbers and 1 new one – 12. First, stand up and we will Sky Write numbers 1 through 11.**

 **STUDENTS DO:** Stand and sky write numbers 1 through 11 with the teacher.

TEACHER SAY: **Now we're going to write our new number – 12! We write 12 with a 1 and a 2. Sky Write it with me three times.**

 **STUDENTS DO:** Sky write 12 with the teacher.

TEACHER SAY: **Wonderful! Now, sit down and write 12 three times in your math journals.**

 **STUDENTS DO:** Sit and write 12 three times in their journals.

TEACHER SAY: **Hold up your journals and show everyone your work.**

 **STUDENTS DO:** Hold up their journals to show their 12's.

2. TEACHER SAY: **Great! Close your journals for now. Yesterday we compared objects by length. Who can tell me what that means? What does length mean?**

 **STUDENTS DO:** Raise hands to volunteer. Selected students answer the question. (Some students may not know the word at this point. Others may be able to use context clues to determine that length is related to longer/shorter.)

TEACHER SAY: When we compare the length of objects, we compare to see which one is longer and which one is shorter. Yesterday, we compared objects to my stick? Raise your hand if you remember one object that was longer than my stick?

 **STUDENTS DO:** Raise hands to volunteer. Selected student answers the question.

TEACHER DO: Repeat question for shorter.

TEACHER SAY: We can also compare the length of many objects. When we do that, we can use different words – longest and shortest. If we compare a group of objects, the longest object is longer than all the other objects. The shortest object is shorter than all the other objects.

TEACHER DO: Draw 3 lines on the chalkboard. Draw the shortest line first, then a longer line, then the longest line. Then, use the words shortest and longest to describe them. Point out that the lengths increase as you move from shortest to longest.

TEACHER SAY: Let's try some together. I am going to give you and a small group of colleagues some objects to compare. Work together to line them up from shortest object to longest object. What should it look like in the middle?

 **STUDENTS DO:** Raise hands to share ideas.

TEACHER DO: Hand out bags of objects to each group. Ask students if they have any questions before they begin.

TEACHER SAY: You will have about 5 minutes to work together.

TEACHER DO: As students work, walk around the classroom to listen to the conversations, monitor progress, and offer help as needed. As groups finish, let them know if they need to make any corrections or if their organization is correct.

 **STUDENTS DO:** Collaborate with each other, talk about the items, compare, resolve disagreements, organize the items, use vocabulary.

TEACHER DO: After about 5 minutes, walk around and check each group's work. Collect all items and prepare for Share.



Share (5-10 mins)

Directions

1. **TEACHER SAY: Was it easy or difficult to compare and organize your objects by length? Was it helpful to talk to each other and share your thinking? How did you get started? Did you have to go back and move things?**

 **STUDENTS DO:** Share thinking with teacher and colleagues.

Lesson 53 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Identify today, yesterday, and tomorrow
- Count from 1 to 20
- Write the numeral 13
- Identify the number of objects in familiar groupings without counting
- Collect data to create a picture graph
- Compare data on a picture graph

STUDENT VOCABULARY:

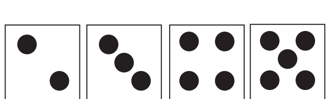
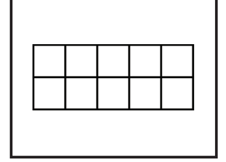
- After
- Before
- Behind
- Beside
- In front of
- Quick Images
- Strategy
- Today
- Tomorrow
- Yesterday

LESSON PREPARATION FOR THE TEACHER

- Collect small paper items of equal size that students can write on. You will need one per student. Examples: small paper plates, sticky notes, circles or squares you have cut out.
- Prepare a spot for a large picture graph called How Many People are in My Family? The more students you have (and the larger your paper objects), the more room you will need. (Examples: classroom wall, hallway, floor, playground) Sample image is shown below.



MATERIALS

Calendar Math Area		4 Quick Image cards	
Three Ten frames (two from previous lesson and one blank one)		Small paper items of equal size that students can write on. (See Lesson Preparation for the Teacher for instructions and examples)	
Blank Picture graph: How Many People are in My Family? (See Lesson Preparation for the Teacher for instructions and examples)		Tape or glue	
Crayons or markers		Math journal and pencil	



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

2. TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: "Today is the (current day) the (current date) of the (current month) (year)."

3. TEACHER SAY: I think you're ready for a new challenge. I would like my Calendar Helper to put a finger on today on the calendar. What day is today?

 **STUDENTS DO:** Calendar Helper puts finger on today and says the day.

TEACHER SAY: Great! I'm going to do something a little different. When I say what day today is, I am going to point my fingers down beside me.

TEACHER DO: Point fingers down beside you.

TEACHER SAY: Today is ______. Does anyone know what yesterday means? Give me a thumbs up if you think you know.

 **STUDENTS DO:** Hold thumbs up if they know what yesterday means.

TEACHER DO: Call on students with thumb up to answer.

TEACHER SAY: Yesterday means the day that came before today. Calendar Helper, can you now put your finger on yesterday and say the day?

 **STUDENTS DO:** Calendar Helper puts finger on the day that was yesterday and says the day.

TEACHER SAY: Watch my hands. When I say yesterday I will point my fingers behind me.

TEACHER DO: Point index fingers behind you.

TEACHER SAY: Yesterday was ______. Give me a thumbs up if you know what tomorrow means.

 **STUDENTS DO:** Hold thumbs up if they know what tomorrow means.

TEACHER DO: Call on students with thumb up to answer.

TEACHER SAY: Tomorrow means the day that comes after today. Calendar Helper, can you now put your finger on tomorrow and say the day?

STUDENTS DO: Calendar Helper puts finger on tomorrow's day and says the day.

TEACHER SAY: This time, I'll point in front of me.

TEACHER DO: Hold out arms and point index fingers forward.

TEACHER SAY: **Tomorrow will be ______. Now, you try it. Stand up and get ready. I will do it, then you will repeat after me. Make sure you're pointing in the right direction!**

STUDENTS DO: Stand beside their chairs.

TEACHER SAY: **Today is ______. (Hands pointing down, beside.)**

STUDENTS DO: Repeat the words and movements.

TEACHER SAY: **Yesterday was ______. (Hands pointing behind.)**

STUDENTS DO: Repeat the words and movements.

TEACHER SAY: **Tomorrow will be ______. (Hands pointing in front.)**

STUDENTS DO: Repeat the words and movements.

4. TEACHER SAY: **Now let's look at our ten frames. We need to add 1 more dot to our ten frame to show today. Then we will count together.**

TEACHER DO: Add a new dot to the ten frame.

TEACHER SAY: **Can I have a volunteer come up and touch each dot on the ten frame and help us count by ones?**


STUDENTS DO: Raise hands to volunteer.

TEACHER SAY: **(Student name) will help us count today. Please count along with them.**


STUDENTS DO: Count aloud together.

TEACHER SAY: **Now, let's count by tens. Today you will do it with me. We will ball up our fists and then let the fingers fly to count to 10. We will count all 10 fingers at the same time. We have 2 tens so we are going to do it 2 times.**

TEACHER DO: Ball up fists and then release them, saying 10.


STUDENTS 0O: Point to the ten frame with the three single dots.

TEACHER SAY: **Now we count on with our single dots.**

TEACHER DO: Hold up 3 fingers.


STUDENTS DO: Hold up 3 fingers.

TEACHER SAY: **Let's point to our fingers and count on. So we have 10, 20… 21, 22, 23.**


STUDENTS DO: Count on their fingers to 23.

TEACHER SAY: **Great counting!**

5. TEACHER DO: Transition to Quick Images.

TEACHER SAY: **Let's get ready for Quick Images. Look at the card I flash and give me a thumbs up when you know the number.**

TEACHER DO: Mix up the cards so they are not in numerical order. Hold the first card up for 3 seconds for the class to see, then flip it back over so they can no longer see the dots.


STUDENTS DO: Give a thumbs up when they know the answer.

TEACHER DO: Call on a student with their thumb up to say how many dots they saw.

 **TEACHER SAY: How did you know it so quickly? Can you explain to the class what you did?**

STUDENTS DO: Explain how they got their answer.

TEACHER SAY: I'm going to show you three more numbers today. See if you can use one of the strategies your colleagues used to help you identify the number.

TEACHER DO: Repeat the procedure with the remaining cards.



Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out math journals and have students open them to the next blank page.

 **STUDENTS DO:** Open math journals to next blank page.

TEACHER SAY: Let's practice writing numbers together. We're going to do 12 old numbers and 1 new one – 13. First, stand up and we will Sky Write numbers 1 through 12.

 **STUDENTS DO:** Stand and sky write numbers 1 through 12 with the teacher.

TEACHER SAY: Now we're going to write our new number – 13! We write 13 with a 1 and a 3. Sky Write it with me three times.

 **STUDENTS DO:** Sky write 13 with the teacher.

TEACHER SAY: Wonderful! Now, sit down and write 13 three times in your math journals.

 **STUDENTS DO:** Sit and write 13 three times in their journals.

TEACHER SAY: Hold up your journals and show everyone your work.

 **STUDENTS DO:** Hold up their journals to show their 13's.

TEACHER SAY: We've been talking about comparing objects by length using longer and shorter. There are other ways to compare things, too. We compare data using graphs and today we're going to create a class group together. First, I'm going to give each of you a ______ (paper plate, sticky note, cut out circle or square) and some crayons.

TEACHER DO: Hand out paper items and crayons.

TEACHER SAY: I will give you 5 minutes to decorate your paper however you like.

 **STUDENTS DO:** Decorate their paper items.

TEACHER SAY: Now we're going to use your decorated items to collect data! Remember, data is a math word for information.

TEACHER DO: Depending on where your graph is located, gather students and prepare them to contribute data to the graph.

TEACHER SAY: Our graph is about the number of people in our family. Think quietly to yourself about how many people are in your family. Who do you think we should count? Mom, Dad, you, your siblings… should we include anyone else?

 **STUDENTS DO:** Decide who should be counted.

TEACHER DO: Help students decide who should be counted. It will be easier to manage the graph if you limit the number of people who are counted.

TEACHER SAY: Look at the graph. Find the number that matches the number of people in your family. When I call you, you will walk up to the graph and tape your paper across from that number. Watch me.

TEACHER DO: Model how to place a paper on the graph across from a number. Begin calling students to the graph. It may be easiest to call students up 2 or 3 at a time. Put tape or glue on the back of the students' papers.



STUDENTS DO: Place their papers on the graph. Seated students observe as the graph grows and changes.

TEACHER SAY: Let's look at the data on our graph. What number of family members did most of us have? How can you tell?



STUDENTS DO: Compare the data and answer the question. Students should note that the most common number has the longest (or longer) line.

TEACHER SAY: What number of family members was the least common? How can you tell?



STUDENTS DO: Compare the data and answer the question. Students should note that the most least number has the shortest (or shorter) line.

TEACHER DO: Ask students additional questions about the data, such as How many students responded 4? How many students responded more than 4? Take special note of students using the words longer, longest, shorter, shortest. Congratulate them for using the math vocabulary they have been learning to compare data.



Share (5-10 mins)

Directions

1. TEACHER SAY: When are some other times we might use the words longer or shorter? Turn and talk to your Shoulder Partner.



STUDENTS DO: Share their ideas with their shoulder partners.

TEACHER SAY: Who would like to share their ideas with the whole class?



STUDENTS DO: Raise their hands to volunteer. Selected students share their thinking.

Lesson 54 Overview

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Identify today, yesterday, and tomorrow
- Count from 1 to 20
- Write the numeral 14
- Identify the number of objects in familiar groupings without counting
- Compare numerical data using greater than, less than, and equal to

STUDENT VOCABULARY:

- Behind
- Beside
- Compare
- Data
- Equal to
- Greater than
- In front of
- Less than
- Strategy
- Today
- Tomorrow
- Yesterday

LESSON PREPARATION FOR THE TEACHER

- Record the data from the How Many People in My Family? graph created yesterday. Write it where students will be able to see it. Example shown below.

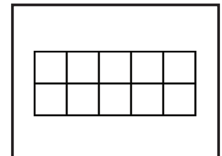
Family Members	Number of Student Responses
2	0
3	4
4	6
5	2
6	7
7	8
8	4

MATERIALS

Calendar Math Area



Three Ten frames (two from previous lesson and one blank one)

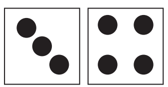


Math journal and pencil



Class picture graph: How Many People are in My Family?

4 Quick Image Cards



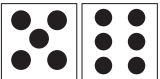


Chart showing data from class picture graph



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

2. TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: "Today is the (current day) the (current date) of the (current month) (year)."

3. TEACHER SAY: Great! Let's talk about today, yesterday, and tomorrow!

TEACHER SAY: Yesterday means the day that came before today. Calendar Helper, can you put your finger on yesterday and say the day?

 **STUDENTS DO:** Calendar Helper puts finger on the day that was yesterday and says the day.

TEACHER SAY: Good! Tomorrow means the day that comes after today. Calendar Helper, can you now put your finger on tomorrow and say the day?

 **STUDENTS DO:** Calendar Helper puts finger on tomorrow's day and says the day.

TEACHER SAY: And what is today?

 **STUDENTS DO:** Respond together: Say current day.

TEACHER SAY: Let's stand up and do our movements for today, yesterday, and tomorrow together.

 **STUDENTS DO:** Stand beside their chairs. Say the words and do the movements with the teacher.

TEACHER SAY: Today is ______. (Hands pointing down, beside.) Yesterday was ______. (Hands pointing behind.) Tomorrow will be ______. (Hands pointing in front.) Great job! It will get easier the more we practice!

4. TEACHER DO: Prepare for movement math

TEACHER SAY: Today we are going to practice counting to 20 by crocodile counting. For this counting, we will chomp the numbers with our crocodile jaws. Watch as I show you how to crocodile count.

TEACHER DO: Model how to crocodile count by putting your arms in front of you and pretending your fingers are teeth. Every time you close the crocodile "teeth" say a number. Show this up to the number 4 so students can see the movement.

TEACHER SAY: Remember, you are strong crocodiles, so really chomp each number.

 **STUDENTS DO:** Crocodile count to 20.

3. TEACHER SAY: Now let's look at our ten frames. We need to add 1 more dot to our ten frame to show today. Then we will count together.

TEACHER DO: Add a new dot to the ten frame.

TEACHER SAY: Can I have a volunteer come up and touch each dot on the ten frame and help us count by ones?

 **STUDENTS DO:** Raise hands to volunteer.

TEACHER SAY: (Student name) will help us count today. Please count along with them.

 **STUDENTS DO:** Count aloud together.

TEACHER SAY: Now, let's count by tens. Today you will do it with me. We will ball up our fists and then let the fingers fly to count to 10. We will count all 10 fingers at the same time. We have 2 tens so we are going to do it 2 times.

TEACHER DO: Ball up fists and then release them, saying 10.

 **STUDENTS DO:** Ball up fists and then release them, saying 10.

TEACHER DO: Ball up fists and then release them, saying 20.

 **STUDENTS DO:** Ball up fists and then release them, saying 20.

TEACHER DO: Point to the ten frame with four single dots.

TEACHER SAY: Now we count on with our 4 single dots.

TEACHER DO: Hold up 4 fingers.

 **STUDENTS DO:** Hold up 4 fingers.

TEACHER SAY: Let's point to our fingers and count on. So we have 10, 20… 21, 22, 23, 24.

 **STUDENTS DO:** Count on their fingers to 24.

TEACHER SAY: Great counting!

Note for the Teacher: Students should now begin to see groups of dots together and have strategies to count on to determine the number. They may also recognize familiar patterns. If a student suggests these strategies, be sure to pause and summarize it again for all students.

5. TEACHER DO: Transition to Quick Images.

TEACHER SAY: Let's get ready for quick images. When you think you know how many dots are on the card, please give me a silent thumbs up on the table.

TEACHER DO: Shuffle the cards so they are not in numerical order. Hold the first card up for 3 seconds for students to see, then flip it back over so they can no longer see the dots.

 **STUDENTS DO:** Put their thumbs on the table when they know the answer

TEACHER DO: Call on a student with their thumb up.

TEACHER SAY: How many dots did you see?

 **STUDENTS DO:** Respond to the question.

TEACHER SAY: How did you know it so quickly? Can you explain to the class what you did? Is it harder or easier when there are more dots?

 **STUDENTS DO:** Explain how they got their answer.

TEACHER DO: Repeat the procedure with the remaining cards.

Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out math journals and have students open them to the next blank page.



STUDENTS DO: Open math journals to next blank page.

TEACHER SAY: Let's practice writing numbers together. We're going to do 13 old numbers and 1 new one – 14. First, stand up and we will Sky Write numbers 1 through 13.



STUDENTS DO: Stand and sky write numbers 1 through 13 with the teacher.

TEACHER SAY: Now we're going to write our new number – 14! We write 14 with a 1 and a 4. Sky Write it with me three times.



STUDENTS DO: Sky write 14 with the teacher.

TEACHER SAY: Wonderful! Now, sit down and write 14 three times in your math journals.



STUDENTS DO: Sit and write 14 three times in their journals.

TEACHER SAY: Hold up your journals and show everyone your work.



STUDENTS DO: Hold up their journals to show their 14's.

TEACHER DO: Display chart of data from the class picture graph so all students can see it.

2. TEACHER SAY: Yesterday, we created a graph to show how many people are in our families. We compared the length of the lines of data using longest and shortest. Today we're going compare the data again in a different way. I counted all of the data and put it on this chart.

TEACHER DO: Direct students' attention to the data chart. Explain what the numbers mean (the left side is the data category, the right side is the number of students who selected it).

TEACHER SAY: Instead of looking at the length of lines today, we're going to compare numbers together. We will use the words greater than, less than, and equal to. Who remembers what greater than means?



STUDENTS DO: Raise hands to respond. Selected students answer the question.

TEACHER SAY: Yes, the number that is greater than is bigger, or more, than the other number.

TEACHER DO: Repeat the process for less than and equal to.

TEACHER SAY: Let's look at how many people have 3 and 4 people in their families. How many people said they have 3 family members?



STUDENTS DO: Raise hands to respond. Selected student answers the question (with or without help from the teacher).

TEACHER SAY: How many people said they have 4 family members?

STUDENTS DO: Raise hands to respond. Selected student answers the question (with or without help from the teacher).

TEACHER SAY: (Pointing to the data chart) Which number is greater, _______ or _______?



STUDENTS DO: Raise hands to respond to the question. Selected student identifies the greater number.

TEACHER SAY: So, I can say, "The number of people who have 3 people in their family is

______ (greater than, less than, or equal to) the number of people who have 4 people in their family." Or I can turn it around and say, "The number of people who have 4 people in their family is ______ (greater than, less than, or equal to) the number of people who have 3 people in their family."**

Now I would like you to try some comparisons using greater than, less than, or equal to. You will work with your Shoulder Partner.

TEACHER DO: Give students data categories to compare.

TEACHER SAY: **Talk to your Shoulder Partners about the data. I'm going to walk around and listen to you.**



STUDENTS DO: Work with their shoulder partners to compare the two pieces of data the teacher assigned.

TEACHER DO: Walk around and listen to students' conversation. If students are struggling with the activity, regroup and do more comparisons as a class. If students are doing well, have volunteers share their comparisons with their colleagues. Repeat as time allows.



Share (5-10 mins)

Directions

1. **TEACHER SAY:** **Great job comparing numbers! Sometimes, I use a number line when I'm comparing numbers. Sometimes I draw objects. What do you do when you are comparing numbers? Do you have any tools or strategies that you use to help you compare?**



STUDENTS DO: Raise hands to volunteer. Selected students share their thinking.

TEACHER DO: Summarize the list of strategies and tools students talked about and encourage students to try them the next time they compare numbers.

Lesson 55 Overview

OUTCOMES	STUDENT VOCABULARY:	LESSON PREPARATION FOR THE TEACHER

OUTCOMES

Students will:

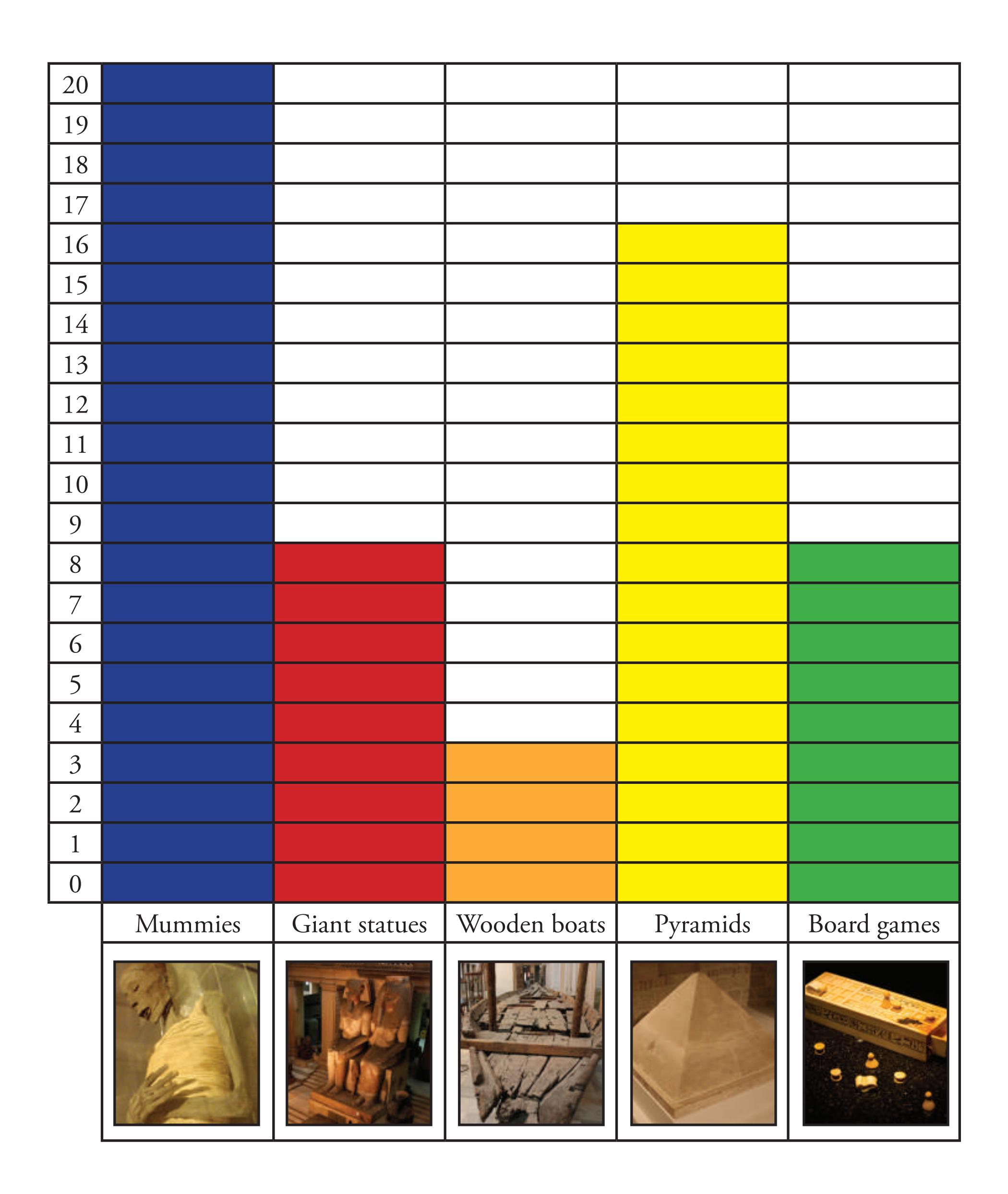
- Participate in Calendar Math activities
- Identify today, yesterday, and tomorrow
- Count from 1 to 20
- Write the numeral 15
- Identify the number of objects in familiar groupings without counting
- Compare numerical data using greater than, less than, and equal to

STUDENT VOCABULARY:

- Compare
- Data
- Equal to
- Greater than
- Less than
- Strategy
- Today
- Tomorrow
- Yesterday

LESSON PREPARATION FOR THE TEACHER

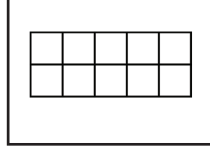
- Draw a number line from 0 to 20 on the board where all students can see it.
- Create a large bar graph called Things I Saw on My Trip to the Museum. Include data up to 20. Example shown below. (Note for the Teacher: This graph can be about any topic, as long as the data points include numbers up to 20.)



Calendar Math Area

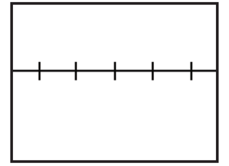


Three Ten frames (two from previous lesson and one blank one)



Large bar graph: Things I Saw on My Trip to the Museum (See Lesson Preparation for the Teacher for instructions and examples)

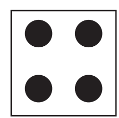
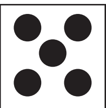
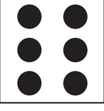
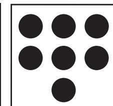
Number lines from 0 to 20, drawn on the board



Math journal and pencil



4 Quick Image cards



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.



STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

2. TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's stand up and do movements for today, yesterday, and tomorrow together.



STUDENTS DO: Stand beside the chairs. Say the words and do movements with the teacher.

TEACHER SAY: Today is ______. (Hands pointing down, beside.) Yesterday was ______. (Hands pointing behind.) Tomorrow will be ______. (Hands pointing in front.) Great job! It will get easier the more we practice!

3. TEACHER DO: Prepare for movement math

TEACHER SAY: Today we are going to practice counting to 20 by hippopotamus counting. For this counting, we will stomp the numbers with our hippopotamus feet. Watch as I show you how to hippopotamus count.

TEACHER DO: Model how to hippopotamus count by stomping one foot and then the other for each number.

TEACHER SAY: **Remember, you are big hippopotamuses, so really stomp each number.**

 STUDENTS DO: Hippopotamus count to 20.

4. TEACHER SAY: **Now let's look at our ten frames. We need to add 1 more dot to our ten frame to show today. Then we will count together.**

TEACHER DO: Add a new dot to the ten frame.

TEACHER SAY: **Can I have a volunteer come up and touch each dot on the ten frame and help us count by ones?**

 STUDENTS DO: Raise hands to volunteer.

TEACHER SAY: **(Student name) will help us count today. Please count along with them.**

 STUDENTS DO: Count aloud together.

TEACHER SAY: **Now, let's count by tens. Today you will do it with me. We will ball up our fists and then let the fingers fly to count to 10. We will count all 10 fingers at the same time. We have 2 tens so we are going to do it 2 times.**

TEACHER DO: Ball up fists and then release them, saying 10.

 STUDENTS DO: Ball up fists and then release them, saying 10.

TEACHER DO: Ball up fists and then release them, saying 20.

 STUDENTS DO: Ball up fists and then release them, saying 20.

TEACHER DO: Point to the ten frame with five single dots.

TEACHER SAY: **Now we count on with our 5 single dots.**

TEACHER DO: Hold up 5 fingers.

 STUDENTS DO: Hold up 5 fingers.

TEACHER SAY: **Let's point to our fingers and count on. So we have 10, 20… 21, 22, 23, 24, 25.**

 STUDENTS DO: Count on their fingers to 25.

TEACHER SAY: **Great counting!**

5. TEACHER DO: Transition to Quick Images.

TEACHER SAY: **Let's get ready for quick images. When you think you know how many dots are on the card, please give me a silent thumbs up on the table.**

TEACHER DO: Shuffle the cards so they are not in numerical order. Hold the first card up for 3 seconds for students to see, then flip it back over so they can no longer see the dots.

 STUDENTS DO: Put their thumbs on the table when they know the answer

TEACHER DO: Call on a student with their thumb up.

TEACHER SAY: **How many dots did you see?**

 STUDENTS DO: Respond to the question.

TEACHER SAY: **How did you know it so quickly? Can you explain to the class what you did? Is it harder or easier when there are more dots?**

 **STUDENTS DO:** Explain how they got their answer.

TEACHER DO: Repeat the procedure with the remaining cards.



Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out math journals and have students open them to the next blank page.

 **STUDENTS DO:** Open math journals to next blank page.

TEACHER SAY: Let's practice writing numbers together. We're going to do 14 old numbers and 1 new one – 15. First, stand up and we will Sky Write numbers 1 through 14.

 **STUDENTS DO:** Stand and sky write numbers 1 through 14 with the teacher.

TEACHER SAY: Now we're going to write our new number – 15! We write 15 with a 1 and a 5. Sky Write it with me three times.

 **STUDENTS DO:** Sky write 15 with the teacher.

TEACHER SAY: Wonderful! Now, sit down and write 15 three times in your math journals.

 **STUDENTS DO:** Sit and write 15 three times in their journals.

TEACHER SAY: Hold up your journals and show everyone your work.

 **STUDENTS DO:** Hold up their journals to show their 15's.

2. TEACHER SAY: Great work! Let's talk about what we did yesterday. We took a closer look at our graph How Many People are in My Family? and compared data. Who remembers what words we used to compare the data?

 **STUDENTS DO:** Raise hands to answer the question. Selected students should respond: greater than, less than, and equal to.

TEACHER SAY: Today, we're going to look at a different kind of graph – a bar graph. I took a trip to a museum and it was amazing! I saw so many wonderful things, I created a graph about it!

TEACHER DO: Display the bar graph. Read the categories at the bottom of the graph.

TEACHER SAY: There are numbers on the side of the bar graph from 0 to 20. The bars go up to a number to tell how many of each wonderful thing I saw. How many mummies did I see?

 **STUDENTS DO:** Raise hands to respond. Selected student responds: 20.

TEACHER SAY: Good job! If I look at the mummy column, I see that it goes all the way up to 20. That means I saw 20 mummies.

TEACHER DO: Write 20 underneath the mummy category. Repeat process for the remaining categories to make sure that students understand how to read the graph.

 **STUDENTS DO:** Help identify the number of responses for each category.

TEACHER SAY: Now, you're going to work with your Shoulder Partner to practice comparing data. Remember to use the words greater than, less than, and equal to. And remember we are practicing. I will help you if you need help and we will learn from each other! Do you have any questions?

 **STUDENTS DO:** Raise hands to ask questions, if necessary.

TEACHER SAY: Work with your partner to compare the number of giant statues I saw with the number of pyramids I saw.



STUDENTS DO: Work with shoulder partners to compare data using greater than, less than, and equal to.

TEACHER DO: Walk around and listen to students' conversations. Offer help when needed.

TEACHER SAY: Who would like to share their comparisons?



STUDENTS DO: Raise hands to volunteer. Selected partners share their comparisons.

TEACHER DO: Help students talk about their comparison using the terms greater than less than, and equal to. Repeat the process, giving students practice comparing data. Walk around and listen to students as they work together and help students use the vocabulary.



Share (5-10 mins)

Directions

1. **TEACHER SAY: Was it easier or harder today to compare data? Why do you think so? Did you try any new strategies today? What will you do the next time you have to compare larger numbers?**

TEACHER DO: Use **Calling Sticks** to select students to answer questions.



STUDENTS DO: Share their thinking when called on by the teacher.

Lesson 56 Overview

OUTCOMES	STUDENT VOCABULARY:
Students will: • Participate in Calendar Math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 16 • Identify the number of objects in familiar groupings without counting • Compare weights using heavier and lighter	• Compare • Heavier • Lighter • Today • Tomorrow • Yesterday

LESSON PREPARATION FOR THE TEACHER

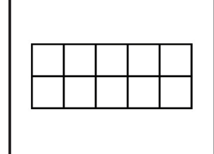
- Gather a box of heavy and light items, enough for each pair of students (or around 20 items for students to share if class size makes this too difficult). Examples: feather, brick, pencil, large book, stuffed animal). Try to include objects that are big but light (such as a piece of foam or an empty shoe box), and small but heavy (like a bag of marbles or a water bottle).
  - Keep box of items for tomorrow's lesson.
- Identify an object that could be considered a medium weight, such as a book. Students will compare the weights of the heavy and light objects against that object.
- 2 long pieces of string or yarn, long enough to form a large circle for sorting (or a hula hoop)

MATERIALS

Calendar Math Area



Three Ten frames (two from previous lesson and one blank one)



Glue



Box of heavy and light items (See Lesson Preparation for the Teacher for instructions and examples)

Math journal and pencil



2 long pieces of string or yarn (See Lesson Preparation for the Teacher for instructions and examples)

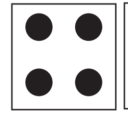
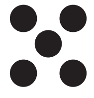
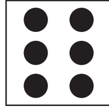
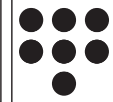
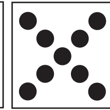
OPTIONAL Video Resources:
TITLE: Weight Part 01


https://tinyurl.com/y7b9s389



Medium-weight object (See Lesson Preparation for the Teacher for instructions and examples)

5 Quick Image cards



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

2. TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's stand up and do our movements for today, yesterday, and tomorrow together.

 **STUDENTS DO:** Stand beside their chairs. Say the words and do the movements with the teacher.

TEACHER SAY: Today is ______. (Hands pointing down, beside.) Yesterday was ______. (Hands pointing behind.) Tomorrow will be ______. (Hands pointing in front.) Great job! It will get easier the more we practice!

3. TEACHER DO: Prepare for movement math.

TEACHER SAY: Today we are going to practice counting to 20 like a new animal. This time one of you will pick the animal and its movement. It can be one we have already done, or you can make up your own. Please raise your hand if you have an idea.

 **STUDENTS DO:** Raise their hands with ideas for animals.

TEACHER DO: Pick a student and have them choose an animal and a movement that goes with the animal to practice counting.

TEACHER SAY: So to count to 20 today we are all going to be ______ (type of animal) and make this movement (demonstrate the movement chosen by the student to go along with the animal). Let's all do it together.

 **STUDENTS DO:** Animal movement to count to 20.

4. TEACHER SAY: Now let's look at our ten frames. We need to add 1 more dot to our ten frame to show today. Then we will count together.

TEACHER DO: Add a new dot to the ten frame.

TEACHER SAY: Can I have a volunteer come up and touch each dot on the ten frame and help us count by ones?

 **STUDENTS DO:** Raise hands to volunteer.

TEACHER SAY: (Student name) will help us count today. Please count along with them.

 **STUDENTS DO:** Count aloud together.

TEACHER SAY: Now, let's count by tens. Today you will do it along with me. We will ball up our fists and then let the fingers fly to count to 10. We will count all 10 fingers at the same time.

We have 2 tens so we are going to do it 2 times.

TEACHER DO: Ball up fists and then release them, saying 10.

 **STUDENTS DO:** Ball up fists and then release them, saying 10.

TEACHER DO: Ball up fists and then release them, saying 20.

STUDENTS DO: Ball up fists and then release them, saying 20.

TEACHER DO: Point to the ten frame with six single dots.

TEACHER SAY: Now we count on with our 6 single dots.

TEACHER DO: Hold up 6 fingers.

 **STUDENTS DO:** Hold up 6 fingers.

TEACHER SAY: Let's point to our fingers and count on. So we have 10, 20… 21, 22, 23, 24, 25, 26.

 **STUDENTS DO:** Count on their fingers to 26.

TEACHER SAY: Great counting!

5. TEACHER DO: Transition to Quick Images

TEACHER SAY: Let's get ready for quick images. When you think you know how many dots are on the card, please give me a silent thumbs up on the table.

TEACHER DO: Shuffle the cards so they are not in numerical order. Hold the first card up for 3 seconds for students to see, then flip it back over so they can no longer see the dots.

 **STUDENTS DO:** Put their thumbs on the table when they know the answer

TEACHER DO: Call on a student with their thumb up.

TEACHER SAY: How many dots did you see?

 **STUDENTS DO:** Respond to the question.

TEACHER SAY: How did you know it so quickly? Can you explain to the class what you did? Is it harder or easier when there are more dots?

 **STUDENTS DO:** Explain how they got their answer.

TEACHER DO: Repeat the procedure with the remaining cards.



Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out math journals and have students open them to the next blank page.

 **STUDENTS DO:** Open math journals to next blank page.

TEACHER SAY: Let's practice writing numbers together. We're going to do 15 old numbers and 1 new one – 16. First, stand up and we will Sky Write numbers 1 through 15.

 **STUDENTS DO:** Stand and sky write numbers 1 through 15 with the teacher.

TEACHER SAY: Now we're going to write our new number – 16! We write 16 with a 1 and a 6.

Sky Write it with me three times.

STUDENTS DO: Sky write 16 with the teacher.

TEACHER SAY: **Wonderful! Now, sit down and write 16 three times in your math journals.**

STUDENTS DO: Sit and write 16 three times in their journals.

TEACHER SAY: **Hold up your journals and show everyone your work.**

STUDENTS DO: Hold up their journals to show their 16's. Put journals to the side.

2. TEACHER SAY: **Who can remind us about what we learned in our last math class? Raise your hand if you remember.**

TEACHER DO: Call on 2-3 hands to review previous material.

TEACHER SAY: **We've been working on comparing objects, data, and numbers using words like longer than, shorter than, greater than, less than, and equal to. Today we are going to talk about some new comparing words: heavier and lighter.**

TEACHER DO: Make two circles on the floor with pieces of string. Bring over the box of objects to compare weight.

TEACHER SAY: **I have made 2 circles on the ground with string. We will use these circles to compare and sort some objects.**

TEACHER DO: Hold up your medium-weight object. Choose a heavy object, such as a brick or large rock from the box. Model comparing the weight of the two objects, doing a think aloud to show students how to compare them.

TEACHER SAY: **This is a ______ (name of heavy object). When I pick it up it feels heavy. It is heavier than my ______ (name of medium-weight object).**

TEACHER DO: Exaggerate how heavy the object is by lowering arms to the ground.

TEACHER SAY: **I am going to sort this ______ into a group of heavier objects.**

TEACHER DO: Place heavy object inside one of the circles. Repeat the comparing, sorting, and thinking aloud with a lighter object.

3. TEACHER SAY: **Now I am going to use Calling Sticks and have you help me compare and sort our other objects.**

TEACHER DO: Pull **Calling Sticks** and have students come up and help sort objects from the box. As this is the first introduction to these words, students may need prompting or reminding. Repeat until all the items have been identified as heavier or lighter and sorted.

STUDENTS DO: When called, students sort one new object into the heavier or lighter circles on the floor.

4. TEACHER SAY: **We made a group of things that are heavier than my _____ (medium-weight object).**

TEACHER DO: Point to the circle of heavy objects

TEACHER SAY: **We made a group of things that are lighter than my _____ (medium-weight object).**

TEACHER DO: Point to the circle of light objects.

TEACHER SAY: **Heavy and light are ways to talk about how much something weighs. Can you repeat those words with me?**

 **STUDENTS DO:** Repeat heavy and light.

5. TEACHER SAY: Please take out your math journals and turn to the next blank page.

 **STUDENTS DO:** Open math journals to the next blank page.

TEACHER SAY: Draw a line down the middle of the page. What is something heavy you could draw on one side of the line?

 **STUDENTS DO:** Raise hands to respond. Selected students identify heavy objects.

TEACHER SAY: Good ideas! Now, draw a heavy object on one side of the page. You can draw something your colleagues suggested or something else.

 **STUDENTS DO:** Draw an object that is heavy

TEACHER DO: Walk around the room and check to see that students have drawn heavy objects.

6. TEACHER SAY: Now, let's draw a light object on the other side of the line. What types of objects are light?

 **STUDENTS DO:** Raise hands and make suggestions of light objects that they can draw.

TEACHER SAY: Now please draw a light object on the other side of the line. You can draw something your colleagues suggested or something else.

TEACHER DO: Walk around the room and check to see that students have drawn light objects.

7. TEACHER SAY: Nice work, share your drawings with your Shoulder Partner and see if they can figure out which drawing is light and which drawing is heavy.

 **STUDENTS DO:** Talk to their partners and show them their drawings.

TEACHER SAY: Talking to your partners, whose "heavy" drawing do you think is heavier? Whose "light" drawing do you think is lighter? For example, if I drew an elephant and my partner drew a cat, the elephant would be heavier.

 **STUDENTS DO:** Talk to shoulder partners, comparing relative weight of the objects they drew.



Share (5-10 mins)

Directions

1. TEACHER SAY: Let's see what you all learned today. Who would like to share their drawings with the class? If I call on you, share your drawings and describe which one is heavy and which one is light.

TEACHER DO: Use **Calling Sticks**, select students to share their drawings and comparisons.

 **STUDENTS DO:** Share drawings and comparisons with the class.

Lesson 57 Overview

OUTCOMES	STUDENT VOCABULARY:	LESSON PREPARATION FOR THE TEACHER
Students will: • Participate in Calendar Math activities • Identify today, yesterday, and tomorrow • Count from 1 to 20 • Write the numeral 17 • Identify the number of objects in familiar groupings without counting • Compare weights using heavier and lighter	• About the same • Heavier • Lighter • Observation • Prediction • Weight	• Prepare a large bag or box filled with something light. • Gather sets of 2 objects that are different weights (one set for each pair of students). Examples: pencil and book, rock and feather

MATERIALS

Calendar Math Area



Three Ten frames (two from previous lesson and one blank one)

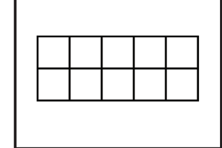


Chart paper or board space to record students' observations



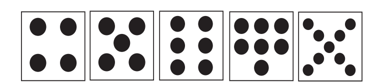
Sets of 2 objects that are different weights (one set for each pair of students) (See Lesson Preparation for the Teacher for instructions and examples)

Math journal and pencil



Large box or bag filled with something light (See Lesson Preparation for the Teacher for instructions and examples)

5 Quick Image cards



Objects from the previous day



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.



STUDENTS DO: Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

2. TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order

- Point to the date on the calendar
- Today's date: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Let's stand up and do our movements for today, yesterday, and tomorrow together.**

 STUDENTS DO: Stand beside their chairs. Say the words and do the movements with the teacher.

TEACHER SAY: **Today is ______. (Hands pointing down, beside.) Yesterday was ______. (Hands pointing behind.) Tomorrow will be ______. (Hands pointing in front.) Great job! It will get easier the more we practice!**

3. TEACHER DO: Prepare for movement math

TEACHER SAY: **Today we are going to practice counting to 20 like a new animal. This time one of you will pick the animal and its movement. If can be one we have already done, or you can make up your own. Please raise your hand if you have an idea.**

 STUDENTS DO: Raise their hand with ideas for movement.

TEACHER DO: Pick a student and have them choose an animal and a movement that goes with the animal to practice counting.

TEACHER SAY: **So to count to 20 today we are all going to be (type of animal) and make this movement (demonstrate the movement chosen by the student to go along with the animal). Let's all do it together.**

 STUDENTS DO: Animal movement to count to 20.

2. TEACHER SAY: **Now let's look at our ten frames. We need to add 1 more dot to our ten frame to show today. Then we will count together.**

TEACHER DO: Add a new dot to the ten frame.

TEACHER SAY: **Can I have a volunteer come up and touch each dot on the ten frame and help us count by ones?**

 STUDENTS DO: Raise hands to volunteer.

TEACHER SAY: **(Student name) will help us count today. Please count along with them.**

 STUDENTS DO: Count aloud together.

TEACHER SAY: **Now, let's count by tens. Today you will do it with me. We will ball up our fists and then let the fingers fly to count to 10. We will count all 10 fingers at the same time. We have 2 tens so we are going to do it 2 times.**

TEACHER DO: Ball up fists and then release them, saying 10.

 STUDENTS DO: Ball up fists and then release them, saying 10.

TEACHER DO: Ball up fists and then release them, saying 20.

 STUDENTS DO: Ball up fists and then release them, saying 20.

TEACHER DO: Point to the ten frame with seven single dots.

TEACHER SAY: **Now we count on with our 7 single dots.**

TEACHER DO: Hold up 7 fingers.

 STUDENTS DO: Hold up 7 fingers.

TEACHER SAY: Let's point to our fingers and count on. So we have 10, 20… 21, 22, 23, 24, 25, 26, 27.

STUDENTS DO: Count on their fingers to 27.

TEACHER SAY: Great counting!

4. TEACHER DO: Transition to Quick Images

TEACHER SAY: Let's get ready for quick images. When you think you know how many dots are on the card, please give me a silent thumbs up on the table.

TEACHER DO: Shuffle the cards so they are not in numerical order. Hold the first card up for 3 seconds for students to see, then flip it back over so they can no longer see the dots.

 **STUDENTS0HER DO:** Call on a student with their thumb up.

TEACHER SAY: How many dots did you see?

 **STUDENTS DO:** Respond to the question.

TEACHER SAY: How did you know it so quickly? Can you explain to the class what you did? Is it harder or easier when there are more dots?

 **STUDENTS DO:** Explain how they got their answer.

TEACHER DO: Repeat the procedure with the remaining cards.



Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out math journals and have students open them to the next blank page.

 **STUDENTS DO:** Open math journals to next blank page.

TEACHER SAY: Let's practice writing numbers together. We're going to do 16 old numbers and 1 new one – 17. First, stand up and we will Sky Write numbers 1 through 16.

 **STUDENTS DO:** Stand and sky write numbers 1 through 16 with the teacher.

TEACHER SAY: Now we're going to write our new number – 17! We write 17 with a 1 and a 7. Sky Write it with me three times.

 **STUDENTS DO:** Sky write 17 with the teacher.

TEACHER SAY: Wonderful! Now, sit down and write 17 three times in your math journals.

 **STUDENTS DO:** Sit and write 17 three times in their journals.

TEACHER SAY: Hold up your journals and show everyone your work.

 **STUDENTS DO:** Hold up their journals to show their 17's.

2. TEACHER SAY: Who can remind us what we learned about in our last math class? Raise your hand if you remember.

TEACHER DO: Call on 2-3 hands to review previous material. Show students the large closed box (filled with something light).

TEACHER SAY: Look at this enormous box! What do you think is inside?

 **STUDENTS DO:** Raise hands and make guesses for what might be inside the box.

3. TEACHER SAY: I am going to pass the box around. I want you to think about whether or not it is heavy or light.

 **STUDENTS DO:** Pass the box around.

TEACHER SAY: Was the box heavy or light? Can you whisper your answer into the room?

 **STUDENTS DO:** Whisper their answers into the air.

TEACHER SAY: How could such a big box be light? Turn and tell your Shoulder Partner.

 **STUDENTS DO:** Turn and discuss their thoughts with their shoulder partners.

TEACHER SAYS: Now, raise your hand and tell us how the big box could be so light.

 **STUDENTS DO:** Raise hands to volunteer. Selected students respond to the question.

TEACHER DO: Listen to their responses. Some students might think it is full of light things like feathers. Others may think it is empty.

4. TEACHER SAY: What will happen to the weight of the box if I add more things to it? Who would like to make a prediction? A prediction is when you tell what you think is going to happen.

 **STUDENTS DO:** Raise hands to volunteer. Selected students share their predictions.

TEACHER DO: Add a few objects to the box. Then have several students lift the box to see if it is heavier.

TEACHER SAY: What will happen to the weight of the box if I remove these objects? Who would like to make a prediction?

TEACHER DO: Remove objects and call on several students to share their predictions. Ask the same students to lift the box again.

TEACHER SAY: How does the box feel now?

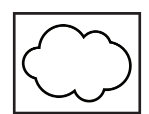
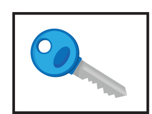
 **STUDENTS DO:** Respond to the question.

5. TEACHER SAY: Today I am going to give you and your Shoulder Partner two objects. With your partner, I want you to decide which object is heavier. As I walk around, show me which object feels heavier by lowering the hand with the heavier object.

TEACHER DO: Give each pair of students their objects and give them 1 minute to discuss which one is heavier.

TEACHER SAY: I am going to ask each pair to come to the front of the room and use the words heavier than, lighter than, or about the same to compare the weights of their objects. I will write down your observations. Observations means the things you noticed.

TEACHER DO: Record students' observations on the board or chart paper. Use a combination of writing and drawing. For example, if comparing a cotton ball and a key, it would look like this:

 is lighter than 

TEACHER DO: Record each pair's observations.

 **STUDENTS DO:** Place their objects in the box after their observations are recorded.



Share (5-10 mins)

Directions

1. **TEACHER SAY: Nice work comparing objects. For share time today, I was wondering if there was anything that surprised you when you were comparing? Raise your hand and tell us if you were surprised by the weight of the objects.**

 **STUDENTS DO:** Raise their hands and share their thinking.

TEACHER DO: Call on several different students to share.

Lesson 58 Overview

Cup Counters Total Number: 10	
Outside	Inside

OUTCOMES

Students will:

- Participate in Calendar Math activities
- Count from 1 to 20
- Identify the number of objects in familiar groupings without counting
- Find combinations that make 10

STUDENT VOCABULARY:

- Strategy
- Ten frame

LESSON PREPARATION FOR THE TEACHER

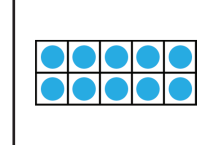
- Gather sets of 10 small counters (one set per pair of students). Examples: beans, dry pasta, buttons)
- Gather opaque paper or plastic cups (one per pair of students).
- Create or print out Ten Frames (one per pair of students)
- Create or print out Cup Counters recording sheets (one per pair of students).

MATERIALS

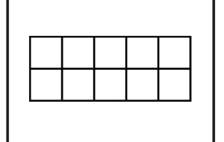
Calendar Math Area



Three Ten frames (two from previous lesson and one blank one)



Blank Ten Frame (one per pair of students)



Set of 10 counters (one set per pair of students)



1 cup (not see-through) per pair of students

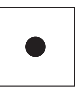
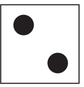
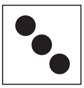
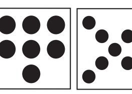
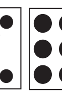


Cup Counters recording sheet (one per pair of students) (See Lesson Preparation for the Teacher for example and instructions.)

Math journal and pencil



6 Quick Image cards



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

2. TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's stand up and do movements for today, yesterday, and tomorrow together.

 **STUDENTS DO:** Stand beside their chairs. Say the words and do the movements with the teacher.

TEACHER SAY: Today is ______. (Hands pointing down, beside.) Yesterday was ______. (Hands pointing behind.) Tomorrow will be ______. (Hands pointing in front.) Great job! It will get easier the more we practice!

3. TEACHER DO: Prepare for movement math

TEACHER SAY: Today we are going to practice counting to 20 like a new animal. This time one of you will pick the animal and its movement. If can be one we have already done, or you can make up your own. Please raise your hand if you have an idea.

 **STUDENTS DO:** Raise their hand with ideas for movement.

TEACHER DO: Pick a student and have them choose an animal and a movement that goes with the animal to practice counting.

TEACHER SAY: So to count to 20 today we are all going to be (type of animal) and make this movement (demonstrate the movement chosen by the student to go along with the animal). Let's all do it together.

 **STUDENTS DO:** Animal movement to count to 20.

3. TEACHER SAY: Now let's look at our ten frames. We need to add 1 more dot to our ten frame to show today. Then we will count together.

TEACHER DO: Add a new dot to the ten frame.

TEACHER SAY: Can I have a volunteer come up and touch each dot on the ten frame and help us count by ones?

 **STUDENTS DO:** Raise hands to volunteer.

TEACHER SAY: (Student name) will help us count today. Please count along with them.

 **STUDENTS DO:** Count aloud together.

TEACHER SAY: Now, let's count by tens. Today you will do it with me. We will ball up our fists and then let the fingers fly to count to 10. We will count all 10 fingers at the same time. We have 2 tens so we are going to do it 2 times.

TEACHER DO: Ball up fists and then release them, saying 10.

 **STUDENTS DO:** Ball up fists and then release them, saying 10.

TEACHER DO: Ball up fists and then release them, saying 20.

 **STUDENTS DO:** Ball up fists and then release them, saying 20.

TEACHER DO: Point to the ten frame with eight single dots.

TEACHER SAY: Now we count on with our 8 single dots.

TEACHER DO: Hold up 8 fingers.

 **STUDENTS DO:** Hold up 8 fingers.

TEACHER SAY: Let's point to our fingers and count on. So we have 10, 20… 21, 22, 23, 24, 25, 26, 27, 28.

 **STUDENTS DO:** Count on their fingers to 28.

TEACHER SAY: Great counting!

4. TEACHER DO: Transition to Quick Images

TEACHER SAY: Let's get ready for quick images. When you think you know how many dots are on the card, please give me a silent thumbs up on the table.

TEACHER DO: Shuffle the cards so they are not in numerical order. Hold the first card up for 3 seconds for students to see, then flip it back over so they can no longer see the dots.

 **STUDENTS DO:** Put their thumbs on the table when they know the answer

TEACHER DO: Call on a student with their thumb up.

TEACHER SAY: How many dots did you see?

 **STUDENTS DO:** Respond to the question.

TEACHER SAY: How did you know it so quickly? Can you explain to the class what you did? Is it harder or easier when there are more dots?

 **STUDENTS DO:** Explain how they got their answer.

TEACHER DO: Repeat the procedure with the remaining cards.



Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out math journals and have students open them to the next blank page.

 **STUDENTS DO:** Open math journals to next blank page.

TEACHER SAY: Let's practice writing numbers together. We're going to do 17 old numbers and 1 new one – 18. First, stand up and we will Sky Write numbers 1 through 17.

 **STUDENTS DO:** Stand and sky write numbers 1 through 17 with the teacher.

TEACHER SAY: Now we're going to write our new number – 18! We write 18 with a 1 and a 8. Sky Write it with me three times.

 **STUDENTS DO:** Sky write 18 with the teacher.

TEACHER SAY: Wonderful! Now, sit down and write 18 three times in your math journals.

 **STUDENTS DO:** Sit and write 18 three times in their journals.

TEACHER SAY: Hold up your journals and show everyone your work.

 **STUDENTS DO:** Hold up their journals to show their 18's.

2. TEACHER DO: Draw a Cup Counter recording sheet on the board. Write the Total: 10.

TEACHER SAY: Today we're going to play a game called Cup Counters. You will play with a partner. You and your partner will get a cup, 10 counters, a ten frame, and a Cup Counter paper.

TEACHER DO: Show students the game materials. As you describe the steps of the game, model them for the students.

TEACHER SAY: I will explain the rules. I would like ______ (student's name) to help me. Watch as we demonstrate how to play. ______ will be Player 1. I will be Player 2.

1. There are 10 counters all together, so the Total Number at the top of the paper is 10.
2. Player 1, ______ (student's name), will hide some of the counters in the cup and leave the rest outside the cup so I can see them.
3. My job is to figure out how many counters are hidden in the cup. I can use the ten frame to help me!
- **I will take the counters and put them on the ten frame. I put 1 counter in each square.**
- **I know there are 10 counters all together and there are ten squares on the ten frame.**
- **My ten frame has ______ counters.**
- **If I count the empty squares, I know how many counters are in the cup!**
- **I tell my answer to ______ (student's name): ______ (number of hidden counters).**

4. ______ (student's name) will then lift the cup and both of us count to see if I am correct.
5. I will write down the number of counters outside and inside the cup on the recording sheet. What should they add up to? (10)
6. Then you'll switch jobs! I will hide some of the counters in the cup and leave some out. ______ (student's name) will figure out how many are inside.

Do you have any questions?

 **STUDENTS DO:** Raise hands to ask questions. Selected students will ask the teacher questions to build understanding of how to play the game.

TEACHER DO: Distribute materials to pairs of students.

 **STUDENTS DO:** Play the game Cup Counters.

TEACHER DO: Walk around the classroom to monitor game play. Answer any questions the students have and ask questions to help students correct errors. Take note of students who need additional help. At the end of the Learn segment, collect all counters and cups.



Share (5-10 mins)

Directions

1. TEACHER SAY: What did you think of the Cup Counters game? Were you able to figure out how many counters were hidden? What strategies did you use? When we play again, what other strategies will you try?

TEACHER DO: Use **Calling Sticks** to select students to share their thinking.

 **STUDENTS DO:** When selected, share their ideas with their colleagues.

TEACHER DO: Listen to students and take note of effective strategies they are using, as well as any misconceptions. Consider how you will help students who need additional support in future lessons.

Lesson 59 Overview

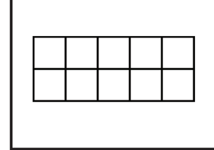
OUTCOMES	STUDENT VOCABULARY:
Students will: • Participate in Calendar Math activities • Count from 1 to 20 • Identify the number of objects in familiar groupings without counting • Find combinations that make 10	• Strategy • Ten frame

MATERIALS

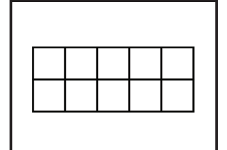
Calendar Math Area



Three Ten frames (two from previous lesson and one blank one)



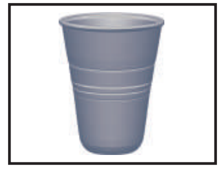
Blank Ten Frame (one per pair of students)



Set of 10 counters (one set per pair of students)



1 cup (not see-through) per pair of students

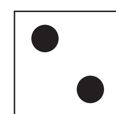
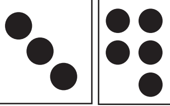
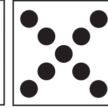
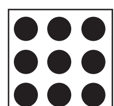
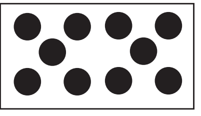


Cup Counters recording sheet (one per pair of students) (See Lesson Preparation for the Teacher for example and instructions.)

Math journal and pencil



6 Quick Image cards



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: **(Student name) is going to help us with our calendar routine.**

2. TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:

- The names of all of the months
- The current month

- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: **Let's stand up and do our movements for today, yesterday, and tomorrow together.**

STUDENTS DO: Stand beside their chairs. Say the words and do the movements with the teacher.

TEACHER SAY: **Today is ______. (Hands pointing down, beside.) Yesterday was ______. (Hands pointing behind.) Tomorrow will be ______. (Hands pointing in front.) Great job! It will get easier the more we practice!**

3. TEACHER DO: Prepare for movement math

TEACHER SAY: **Today we are going to practice counting to 20 like an animal. Who would like to suggest an animal and a movement? Please raise your hand if you have an idea.**



STUDENTS DO: Raise their hand with ideas for movement.

TEACHER DO: Pick a student and have them choose an animal and a movement that goes with the animal to practice counting.

TEACHER SAY: **So to count to 20 today we are all going to be (type of animal) and make this movement (demonstrate the movement chosen by the student to go along with the animal). Let's all do it together.**



STUDENTS DO: Animal movement to count to 20.

4. TEACHER SAY: **Now let's look at our ten frames. We need to add 1 more dot to our ten frame to show today. Then we will count together.**

TEACHER DO: Add a new dot to the ten frame.

TEACHER SAY: **Can I have a volunteer come up and touch each dot on the ten frame and help us count by ones?**



STUDENTS DO: Raise hands to volunteer.

TEACHER SAY: **(Student name) will help us count today. Please count along with them.**



STUDENTS DO: Count aloud together.

TEACHER SAY: **Now, let's count by tens. Today you will do it with me. We will ball up our fists and then let the fingers fly to count to 10. We will count all 10 fingers at the same time. We have 2 tens so we are going to do it 2 times.**

TEACHER DO: Ball up fists and then release them, saying 10.



STUDENTS DO: Ball up fists and then release them, saying 10.

TEACHER DO: Ball up fists and then release them, saying 20.



STUDENTS DO: Ball up fists and then release them, saying 20.

TEACHER DO: Point to the ten frame with nine single dots.

TEACHER SAY: **Now we count on with our 9 single dots.**

TEACHER DO: Hold up 9 fingers.

STUDENTS DO: Hold up 9 fingers.

TEACHER SAY: Let's point to our fingers and count on. So we have 10, 20… 21, 22, 23, 24, 25, 26, 27, 28, 29.

 **STUDENTS DO:** Count on their fingers to 29.

TEACHER SAY: Great counting!

6. TEACHER DO: Transition to Quick Images

TEACHER SAY: Let's get ready for quick images. When you think you know how many dots are on the card, please give me a silent thumbs up on the table.

TEACHER DO: Shuffle the cards so they are not in numerical order. Hold the first card up for 3 seconds for students to see, then flip it back over so they can no longer see the dots.

 **STUDENTS DO:** Put their thumbs on the table when they know the answer

TEACHER DO: Call on a student with their thumb up.

TEACHER SAY: How many dots did you see?

 **STUDENTS DO:** Respond to the question.

TEACHER SAY: How did you know it so quickly? Can you explain to the class what you did? Is it harder or easier when there are more dots?

 **STUDENTS DO:** Explain how they got their answer.

TEACHER DO: Repeat the procedure with the remaining cards.



Learn (25-30 mins)

Directions

1. TEACHER DO: Hand out math journals and have students open them to the next blank page.

 **STUDENTS DO:** Open math journals to next blank page.

TEACHER SAY: Let's practice writing numbers together. We're going to do 18 old numbers and 1 new one – 19. First, stand up and we will Sky Write numbers 1 through 18.

 **STUDENTS DO:** Stand and sky write numbers 1 through 18 with the teacher.

TEACHER SAY: Now we're going to write our new number – 19! We write 19 with a 1 and a 9. Sky Write it with me three times.

 **STUDENTS DO:** Sky write 19 with the teacher.

TEACHER SAY: Wonderful! Now, sit down and write 19 three times in your math journals.

 **STUDENTS DO:** Sit and write 19 three times in their journals.

TEACHER SAY: Hold up your journals and show everyone your work.

 **STUDENTS DO:** Hold up their journals to show their 19's.

2. TEACHER DO: Draw a Cup Counter recording sheet on the board. Write the Total: 10.

TEACHER SAY: Today we're going to play the game Cup Counters again. You and your partner will get a cup, 10 counters, a ten frame, and a Cup Counter paper.

TEACHER DO: Show students the game materials. Review game play, if necessary.

TEACHER SAY: **I will review the rules.**

1. There are 10 counters all together, so the Total Number at the top of the paper is 10.
2. Player 1 hides some of the counters in the cup and leaves the rest outside the cup so I can see them.
3. Player 2 figures out how many counters are hidden in the cup. They can use the ten frame or another strategy.
- **The ten frame is helpful because there are 10 counters all together and 10 squares on the ten frame. If I can see how many counters there are on the ten frame, I can figure out how many are hidden in the cup.**

4. Then the players check the answer.
5. We write down the number of counters outside and inside the cup on the recording sheet. They should add up to 10.
6. Then players switch jobs.

Do you have any questions?



STUDENTS DO: Raise hands to ask questions. Selected students will ask the teacher questions to build understanding of how to play the game.

TEACHER DO: Distribute materials to pairs of students.



STUDENTS DO: Play the game Cup Counters.

TEACHER DO: Walk around the classroom to monitor game play. Answer any questions the students have and ask questions to help students correct errors. Take note of students who need additional help. At the end of the Learn segment, collect all counters and cups.



Share (5-10 mins)

Directions

1. TEACHER SAY: **Did you try any new counting strategies today when you were playing Cup Counters? Did they work? What other tools do you have to help you count to 10? Do you have any questions about the game?**

TEACHER DO: Use **Calling Sticks** to select students to share their thinking.



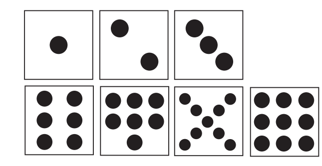
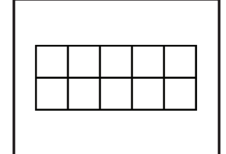
STUDENTS DO: Share their thinking and strategies with colleagues. Ask questions if they have any.

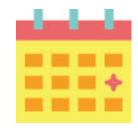
Lesson 60 Overview

OUTCOMES

Students will:
- Participate in Calendar Math activities
- Count from 1 to 20
- Write the numeral 20
- Represent quantities from 1 to 20 in drawings

MATERIALS

Calendar Math Area		7 Quick Image cards (any 7)	
Three Ten frames (two from previous lesson and one blank one)		Large sheet of paper (construction paper or other art paper)	
Crayons or markers		Math journal and pencil	



Calendar (15-20 mins)

Directions

1. TEACHER DO: Using **Calling Sticks**, choose a student to lead calendar time.

 **STUDENTS DO:** Selected student comes to the front of the class to help the teacher.

TEACHER SAY: (Student name) is going to help us with our calendar routine.

2. TEACHER DO: Let the student help walk the class through the routine. They should say/do the following and ask their colleagues to repeat:
- The names of all of the months
- The current month
- The current day of the week
- All days of the week in order
- Point to the date on the calendar
- Today's date: "Today is the (current day) the (current date) of the (current month) (year)."

TEACHER SAY: Let's stand up and do movements for today, yesterday, and tomorrow together.

 **STUDENTS DO:** Stand beside chairs. Say the words and do the movements with teacher.

TEACHER SAY: Today is ______. (Hands pointing down, beside.) Yesterday was ______. (Hands pointing behind.) Tomorrow will be ______. (Hands pointing in front.) Great job! It will get easier the more we practice!

3. TEACHER DO: Prepare for movement math

TEACHER SAY: Today we are going to practice counting to 20 like an animal. Who would like to suggest an animal and a movement? Please raise your hand if you have an idea.

 **STUDENTS DO:** Raise their hand with ideas for movement.

TEACHER DO: Pick a student and have them choose an animal and a movement that goes with the animal to practice counting.

TEACHER SAY: So to count to 20 today we are all going to be (type of animal) and make this movement (demonstrate the movement chosen by the student to go along with the animal). Let's all do it together.

 **STUDENTS DO:** Animal movement to count to 20.

4. TEACHER SAY: Now let's look at our ten frames. We need to add 1 more dot to our ten frame to show today. Then we will count together.

TEACHER DO: Add a new dot to the ten frame.

TEACHER SAY: What do you notice about our ten frames?

 **STUDENTS DO:** Respond together: They're all full.

TEACHER SAY: They are full! How does that help us count?

 **STUDENTS DO:** Raise hands to respond. Students may note that we can count all of the dots by tens now.

TEACHER SAY: Can I have a volunteer come up and touch each dot on the ten frame and help us count by ones?

 **STUDENTS DO:** Raise hands to volunteer.

TEACHER SAY: (Student name) will help us count today. Please count along with them.

 **STUDENTS DO:** Count aloud together.

TEACHER SAY: Now, let's count by tens. Today you will do it with me. We will ball up our fists and then let the fingers fly to count to 10. We will count all 10 fingers at the same time. How many tens do we have now?

 **STUDENTS DO:** Respond together: 3!

TEACHER SAY: Yes! Now we have 3 tens so we are going to do it 3 times.

TEACHER DO: Ball up fists and then release them, saying 10.

 **STUDENTS DO:** Ball up fists and then release them, saying 10.

TEACHER DO: Ball up fists and then release them, saying 20.

 **STUDENTS DO:** Ball up fists and then release them, saying 20.

TEACHER DO: Ball up fists and then release them, saying 30.

 **STUDENTS DO:** Ball up fists and then release them, saying 30.

TEACHER SAY: Great counting!

5. TEACHER DO: Transition to Quick Images.

TEACHER SAY: Let's get ready for quick images. When you think you know how many dots are on the card, please give me a silent thumbs up on the table.

TEACHER DO: Shuffle the cards so they are not in numerical order. Hold the first card up for a 2-3 seconds for students to see, then flip it back over so they can no longer see the dots.

 **STUDENTS DO:** Put their thumbs on the table when they know the answer

TEACHER DO: Call on a student with their thumb up.

TEACHER SAY: How many dots did you see?

 **STUDENTS DO:** Respond to the question.

TEACHER SAY: How did you know it so quickly? Can you explain to the class what you did? Is it harder or easier when there are more dots?

 **STUDENTS DO:** Explain how they got their answer.

TEACHER DO: Repeat the procedure with the remaining cards.



Learn (25-30 mins)

Directions

1. TEACHER SAY: Let's practice writing numbers together. We're going to do 19 old numbers and 1 new one – 20. First, stand up and we will Sky Write numbers 1 through 19.

 **STUDENTS DO:** Stand and sky write numbers 1 through 19 with the teacher.

TEACHER SAY: Now we're going to write our new number – 20! We write 20 with a 2 and a 0. This is the first time we've written a number that starts with 2! Sky Write it with me three times.

 **STUDENTS DO:** Sky write 20 with the teacher.

TEACHER SAY: Wonderful! Now, sit down and write 20 three times in your math journals.

 **STUDENTS DO:** Sit and write 20 three times in their journals.

TEACHER SAY: Hold up your journals and show everyone your work.

 **STUDENTS DO:** Hold up their journals to show their 20's.

2. TEACHER SAY: Let's celebrate getting to 20! Today, you're going to do an art project to show all of the numbers from 1 to 20.

TEACHER DO: Hand out construction paper (or other paper) and crayons and/or markers.

TEACHER SAY: To start your art project, write all of the numbers from 1 to 20 down one side of the paper, like this:

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

 **STUDENTS DO:** Write numbers 1 through 20 on their papers.

TEACHER DO: Walk around the classroom to monitor students' work. Help students correct errors in their numbering.

TEACHER SAY: Now, you're ready to create! You're going to draw pictures or shapes to show each number. You can draw whatever you like, but make sure it fits on the paper. Let's say

I want to draw hearts for 1. How many hearts should I draw?

 STUDENTS DO: Raise hands to volunteer. Selected student answers: 1.

TEACHER DO: Model drawing 1 heart across from 1.

TEACHER SAY: **I want to draw smiley faces for 2. How many smiley faces should I draw?**

 STUDENTS DO: Raise hands to volunteer. Selected student answers 2.

TEACHER DO: Model drawing 2 smiley faces across from 2.

TEACHER SAY: **Thank you for helping me! Now you can get started. You can draw all the same picture or you can mix it up and draw different things. Raise your hand if you need help as you're working.**

 STUDENTS DO: Work on their math art projects.

TEACHER DO: Walk around the room and monitor students' work. Offer help as needed.



Share (5-10 mins)

Directions

1. TEACHER SAY: **For Share time today, I would like you to share your art projects. I will call 5 of you up at once. Bring your art projects and hold them in front of you.**

TEACHER DO: Use **Calling Sticks** to call 5 students at a time to showcase their artwork. The **Calling Sticks** will help you make sure you call all students without repeating.

 STUDENTS DO: Share their work with their colleagues.

TEACHER DO: Collect and display students' projects.




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